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Government of Bombay.

GENERAL DEPARTMENT.

ARCHÆOLOGY.

Progress Report of the Archæological Survey of India, Western Circle, for the year ending 31st March 1915.

PART I.

I.—DEPARTMENTAL NOTES.

During the year under Report there was no change in the *personnel* of the office, myself and my Assistant Mr. Page remaining in our respective charges throughout the year.

Personnel.

2. Owing to ill-health my Second Clerk, Mr. Chintaman Ravji Gokhale, was, in October 1914, on privilege leave for 16 days only.

Establishment.

There was no other change in the Establishment.

II.—YEAR'S WORK.

3. Soon after the completion of my touring about the beginning of May 1914, I was engaged upon writing out my Progress Report. The descriptive part of it, at any rate, being of the nature of scholarly work and consequently requiring much thought and sifting of evidence, is anything but an easy or light matter. A brief summary of my research and exploration works had also to be prepared for the Administrative Part of the Director-General's *Archæological Annual*, and also a full and exhaustive article, describing all the results achieved during excavations for the second part of that *Annual*. Mr. Page was occupied with writing out his "Conservation Comment" for the Progress Report and helping me in various other matters connected with its compilation. He was also very busy with drawing up and printing Conservation Notes from the jottings he had taken for the preservation of many archæological monuments he had visited.

Work at Head-quarters.

4. My Photographer was engaged upon developing 280 photo-negatives and preparing no less than 2,292 prints from them to accompany the last year's Progress Report submitted to Government. From other negatives also he had to take nearly 340 prints, some of which were required by the Director-General of Archæology, some by Mr. Cousens, the late Superintendent of this Circle, and some to accompany the Conservation Notes forwarded to the Director-General for his approval. In this work he was no doubt assisted to some extent by the Third Draftsman-Photographer, but there can be no doubt that the photographic work of this Circle is increasing rapidly and has already become somewhat difficult for one single man to cope with. The Head-Draftsman and the second Draftsman-Photographer were occupied with finishing the drawings they had plotted in the field. In connection with the publication of Mr. Cousens' volumes also, they had to finish a few drawings which were incomplete and prepare some new ones which were not available in the office. They had also to prepare, for office references, copies of several tracings accompanying estimates from the different Executive Engineers framed in accordance

with the conservation proposals made by this Department. My Second Draftsman I also set upon cleaning, and preparing lists of, the moveable antiquities which came to light during my excavations at Besh and which I had brought to Headquarters for careful examination.

5. The first part of the touring season I spent in Kāthiāwār and Cutch, selecting or securing antiquities from the local museums for the Prince of Wales Museum, Bombay, and training Mr. K. N. Dikshit, Assistant Curator of the latter museum, for the work that is expected of him and for which he was recently appointed. From about the end of December to about the middle of February last I was encamped at Besh for excavation purposes, making intermittent visits to Ajmer and Ajañṭā. The third and last part of the touring season, *i. e.*, during March last, I was at Tāṇḍo-Mahammad-khān near Hyderābād in Sind, excavating at a *stūpa* mound. The diary of my movements may be seen in Appendix A. Mr. Page, I am glad, was able to go through the whole of his touring programme given in paras. 43-44, pp. 10-11, of the last year's Progress Report, and was able to visit in addition Bāgh Caves in the Gwālīor State which stood in great need of conservation measures and Sāñchī where he helped the Director-General of Archæology in effecting repairs to certain monuments. The same appendix contains a statement of his movements also.

III.—PUBLICATIONS.

6. Beyond the Annual Progress Report for the year 1913-14 no official publications were brought out by this Department during the year under report. An article was, however, contributed by me to the *Annual* of the Director-General of Archæology, describing fully and exhaustively the excavation work carried out by me at Besh in the Gwālīor State.

IV-V.—OFFICE LIBRARY AND ANNUAL EXPENDITURE.

7. A list of new books added to the office library is given in Appendix F and a statement of the annual expenditure of the Survey for the last year in Appendix E.

VI.—MUSEUMS.

8. With the unanimous consent of the Trustees, the building of the Prince of Wales Museum of Western India was, on the 10th of November 1914, converted by Government into Lady Hardinge Hospital for Indian troops. As the building was nearing its completion, a Committee had been appointed by the Board to consider the question of furnishing and fitting it. Being a member of this Committee, I was engaged on a scheme concerning the fitting-up of the Archæological galleries and the selection of the most suitable and up-to-date types of exhibition cases with the co-operation and guidance of the Director-General of Archæology. But with the conversion of the building into the base hospital this work has temporarily been held in abeyance.

9. In August 1912, the Trustees held a meeting and passed a resolution asking Mr. S. M. Edwardes, C.S.I., I. C. S., and myself "to recommend to the Board which of the archæological specimens available in Bombay and the Presidency for the purposes of the Museum should be given a place there." Of course, it was impossible for us to undertake a roving commission through the Presidency for a work which required the services of a full-time expert. Accordingly at a meeting held in February 1913, I brought to the notice of the Board the exceeding desirability of appointing a special official for that purpose, and suggested their applying to the Director-General of Archæology to recommend a suitable antiquarian. I was glad my proposal commended itself to the Board, and the Director-General of Archæology was soon approached. After some correspondence in regard to pay and position he recommended Mr. K. N. Dikshit, M.A., one of the scholars who was under his training. The recommendation was approved by the Trustees, and Mr. Dikshit joined his new post on the 1st of

November last and has attached himself to my office, pending the opening of the Museum. His first and important duty was to select articles suitable for exhibition in the Archæological Section from among the moveable antiquities which are to be found in numbers all over the Presidency. In order to give him a clear insight into his duties, I undertook a tour in Kāthiāwār and Cutch, and took him with me. My object was to visit the museums of Kāthiāwār and examine and make selections from archæological collections, with which again I was previously not personally acquainted. It is extremely desirable that the Prince of Wales Museum being the Presidency Museum, its antiquarian collection should be a thoroughly representative one, *i.e.*, representative of all the classes of antiquities obtaining in the Presidency. But this will be possible only if each State or Local Museum within the limits of the Presidency makes some presents from its antiquarian exhibits. Again, what I have said with reference to the Ajmer Museum in my Report for the year ending 31st March 1913, holds good with equal, perhaps greater, force in the present case also. For, if, in such a small province as Kāthiāwār, each State were to insist upon having an archæological section to its museum, none of these collections could be sufficiently extensive and varied to have any educative value. To take an instance, it is scarcely necessary for me to tell a student of archæology how precious as records the inscriptions of the Kshatrapa dynasty are for the ancient history of Western India, and how exceedingly indispensable it is that they should all be brought together for patient study and comparison to a central place where they can be accessible to all interested in Indian antiquities. As it is, three of these Kshatrapa inscriptions are in the Watson Museum, Rājkoṭ, two in the Junāgaḍh, and no less than five in the Bhuj, Museum. Over and above the sad drawback that these inscribed stones are distributed over three different places, there is this seriously unfortunate circumstance that they are all in places where there are no individuals possessing more than, at best, a dilettante interest in antiquities (at any rate I met none in the whole of Kāthiāwār and Cutch) and where it would be extremely inconvenient for real students of archæology to go and study. With reference to the Bhuj Museum, in particular, no particular care seems to have been taken of these precious relics of the past. The stones were for years lying in the stores of the Engineering Department, and some with inscribed faces downwards, notwithstanding that the State Museum was in existence. They have been removed recently, I hear, to this museum, but instead of being properly exhibited on masonry stands in a hall as they certainly would where they were valued, they were found by me in December last huddled together in a dark corner near the staircase on the ground floor; and what is more unfortunate, one of these stones was in the transit broken in twain. Evidently no care was taken of these objects, because nobody felt any interest in them, there being no antiquarians in the State. Taking an impartial view of the subject, no unbiassed and disinterested person can deny the extreme desirability, nay the absolute necessity, of these epigraphic records of the Kshatrapa period being brought together to Bombay and placed in the Prince of Wales Museum where they will be easily accessible to all antiquarians and scholars. I have represented this matter as best as I could to the Honourable Mr. J. Sladen, Agent to the Governor in Kāthiāwār, who is also President of the Watson Museum Committee, and to the Bhuj Durbār through Major Pottinger, Political Agent for Cutch and Morvi in Adhoi, but have not yet received any reply from them.

10. In Kāthiāwār I paid visits to four museums, *viz.*, those of Bhāvnagar, Valā, Junāgaḍh and Rājkoṭ. The Bhāvnagar Durbār, celebrated for his sympathy and munificence in all matters, was kind enough to make a present of many valuable antiquarian things from his Barton Museum, Bhāvnagar, a list of which will be found in Appendix G. The most important feature of this present was sixty silver Kshatrapa coins. Considering that these coins are coming to market for sale in less and less quantities every day and that very few well-preserved and dated specimens are now available, this present of sixty coins is of great value, and, in fact, they are the best sixty of the lot of Kshatrapa coins deposited in the Barton Museum, Mr. Dikshit and I sparing no pains in this selection.

11. When I went to Valā, the Chief was away on a pilgrimage, but his Kārbhāri, who represented him, was good enough to show me the antiquarian

collection and allowed me to select any article which I required for the Prince of Wales Museum. Appendix G specifies the articles so selected and secured. The most valuable of these from the antiquarian point of view are five bronze images, nearly 7" in height. They are Buddhist figurines and are of approximately the 6th century. What constitutes their chief value is the inscribed letters they bear on their pedestals. They are, indeed, unique acquisitions for the Bombay Museum. The Valā Chief is said to be very fond of excavations, and is reported to have found these bronzes in a piece of land belonging to one Abbhal Girāsia and to the north of the city wall. In another place he appears to have lighted upon a hoard of nearly 4,000 silver Guptas, as a short note on a piece of paper in one of the Valā Museum cases informs us. I requested the Kārbhārī to inquire about it, but no trace of these coins was forthcoming. It is feared that they were melted.

12. In regard to the Bahādur Museum, Junāgaḍh, I did not think it advisable to ask for any present of antiquities as the present Chief is a minor. But the fact that in April 1909 the Junāgaḍh Durbār allowed me to select the best fifty-seven of the Uparkoṭ hoard of silver Kshatrapas described by Rev. Mr. Scott in *Four. Bomb. As. Soc.*, Vol. XX, p. 201 ff., inspires me with the hope that the Chief, when he assumes powers, will be sympathetic enough to make a similar handsome present of such antiquities from his State Museum as can in the interest of archæology be more usefully and profitably exhibited in the Prince of Wales Museum.

13. At the Watson Museum, Rājkoṭ, and at the State Museum, Bhuj, also, I made a selection of antiquarian objects over and above the stone inscriptions of the Kshatrapa period referred to above. I have not yet been informed whether the Watson Museum Committee or the Bhuj Durbār has decided to present the Prince of Wales Museum with these articles. I have already stated that it serves no educative purpose at all for any museum to maintain a jealous grip on every one of its archæological exhibits if the transfer of any of these elsewhere can bring about a better appreciation and study which they most certainly deserve.

14. My tour in Kāthiāwār and Cutch came to an end about the middle of December, and by this time I was able to impart full instructions to Mr. Dikshit regarding the classes of antiquities to be secured, how to secure them, and by what methods to know where they were existing. I then left him to undertake tours independently of me and advised him first to explore Dhārwar.

15. In September last Government informed me that the beautiful old wood-carving of Vādi Pārasnāth temple at Pāṭan in Gujarat was for sale and asked for my opinion as to whether and at what price it was worth purchasing. I replied that the article was worth acquiring even at Rs. 1,500. On making inquiries, however, Government found that it had been sold as early as March 1914, through Mr. P. M. Hutheesing of Ahmedābād, to an American gentleman, Mr. Lockwood de Forest of New York, who acquired it for a museum in the United States. Mr. Hutheesing, however, promised to give all help to any officer who might be instructed by Government to purchase the wood-carving of any houses or temples in Ahmedābād and other places which had been pulled down or were on the point of being pulled down. Accordingly by Resolution No. 9560, General Department, of the 26th November 1914, I was directed by Government to avail myself of the co-operation of Mr. Hutheesing and report which of the carvings might with advantage be purchased. I at once put myself in communication with him, and though I learnt from a man of his firm that Mr. Hutheesing was dead, the firm was willing to give me all help in the matter. As, at the time I received this communication, it was not possible for me to leave Besh where I was encamped and where excavation work was in full swing, I instructed Mr. Page to go to Ahmedābād and make the necessary report as he was then on tour in North Gujarāt. About the beginning of February Mr. Page visited Ahmedābād, and, with a representative of Messrs. P. M. Hutheesing and Sons, inspected a number of houses and temples containing specimens of Gujarāt wood-carving; but for one reason or another none that he saw were suitable or

available for museum purchase. There are at least four houses in Ahmedābād, which, from an architectural point of view, are, indeed, gems; but their owners are not open to consider their sale except at a prohibitively inflated price. I have already recommended them all to Government for notification as "Protected Monuments" in private possession. They certainly deserve it, as, apart from being merely elaborate, they are eminently architectural in treatment. Besides, when once they are declared protected, it removes all possibility of any American or foreign purchaser intruding, and Government will have the first chance of acquiring them in full or in part in case the owners owing to reduced or other circumstances are compelled to sell them. With regard to temple wood work, it distinctly lacks the architectural merit of the house fronts; the treatment of the ornament and carving generally tends towards mere inordinate profusion, in the panelled reliefs especially. Again, the price asked by the temple managers in two instances was Rs. 10,000, which appears to be about twenty times the value. It seems that the price demanded is that which will enable the wood work to be replaced with modern marble carving which these temple managers are all being anxious to obtain nowadays.

16. I have stated in my last year's Report that when my office was shifted to Government Central Offices Buildings in Poona. March 1914, the whole of the archæological collection, except large heavy stones and the coins cabinet, of the museum attached to my office, was sent to Bombay, there being no room in the suite of rooms assigned to us in the new building. A list of the new articles acquired, most of which are presents of coins from other Governments, has been given in Appendix G, along with the acquisitions of other museums.

VII-VIII.—THE LISTING OF MONUMENTS AND ORIGINAL RESEARCH.

17. The work of preparing an inventory of the archæological monuments of the Gwālior State, which was begun by me in 1913-14, is being pushed through vigorously by Mr. M. B. Garde, Inspector of Archæology of that State. During the period under report he surveyed parts of the Amjherā and Gwālior Gird, the major portion of the Mandasaur and Esāgarh, and the whole of the Narwār District, listing thereby no less than three hundred and five monuments. The most important of these that he visited are the celebrated caves of Bāgh in the Amjherā District. No good photographs had so far been taken or reliable drawings made of these monuments, they not being easily accessible. I, therefore, sent Mr. Garde to these caves along with Mr. Page and my office photographer and draftsman. The long felt desideratum has thus been supplied, and my office now contains excellent photographs and most reliable drawings of the caves, which, I have no doubt, will be of great use to an archæologist in his study of ancient architecture. The most interesting discovery, however, made during Mr. Garde's tours is the identification of Padmāvati, one of the seats of the Nāga dynasties and the scene of the well-known drama called *Mālatī-Mādhava* by the Sanskrit poet Bhavabhūti. Various attempts at locating this place had been made by scholars and antiquarians like Wilson and Cunningham, but none proved satisfactory. It is now impossible to doubt that Padmāvati is Pawāyā, 15 miles south-west of the Dabrā railway station on the Midland section of the G. I. P. Railway. The reasons for this identification will be found duly set forth in Part II, p. 68, para. 17.

18. Equally important "listing" work was carried out in the Baroda State. In my last year's Report I adverted to the genuine solicitude evinced by the Baroda Durbār for the care and preservation of the archæological structures obtaining in the State. But no systematic programme it was possible in this respect to lay down unless the various districts were surveyed and the necessary inventory of the monuments compiled. The Kadi District of the State was no doubt surveyed so long ago as 1890, but no such work had been undertaken in the other divisions. Hence the Baroda Durbār was anxious to see this work taken up as early as possible, and with this end in view Mr. Coyle, Chief Engineer, Baroda State, put himself in communication with me. As a preliminary to the execution of this work I drew his attention to the enumeration of antiquarian places at the close of the volume on *North Gujarat* by Dr. Burgess

and Mr. Cousens, and showed the great desirability of preparing an initial list based upon reports from the local officials in regard to the archæological remains at each place. Thanks to the perseverance and enthusiasm of Mr. Coyle, this list was within a short time compiled and submitted to me for revision. It was, however, no easy matter for me to arrange for this revision, as I and Mr. Page were both more than fully occupied with other kinds of work. Besides, the revision of an initial list always means the weeding out of a good many entries from it of objects which district and other officials from their not being well conversant with antiquarian matters often erroneously fancy to be archæologically important, and consequently involves waste of time in proportion to this weeding out. We could ill afford to waste time in this manner, when we were already hard pressed with other duties. Accordingly I entrusted this work of revision to my draftsman Mr. L. R. Date, who had helped me in Rājputānā where I was engaged a few years ago in the preparation of such lists for that province and who thus fully knew what exactly was required for this purpose. He toured from the 22nd November 1914 to the 13th February 1915 in the Baroda State, and completed the inspection of monuments so far as the Baroda and Navasari Districts were concerned. He visited seventy-five monuments in all and has classified them according to their importance. Those of the first and second classes will be duly inspected by Mr. Page with a view to propose measures for their conservation to the Durbār. Amreli, which is the only district now outstanding, will be explored most probably next season.

IX.—EXCAVATION.

19. As intimated in the programme published in my last year's Report, I resumed excavations at Besh neat Bhilsā in the
Besh.
Gwālior territory. This year also the Gwālior Durbār was kind enough to place a sum of Rs. 4,000 at my disposal and direct Mr. Garde, Inspector of Archæology, to help me. Excavations were started at three different places, *viz.*, (1) the Khām Bābā site, (2) on a mound in the heart of the ruins of Vidiśā (Besh), and (3) on a hillock of *débris* on the north-western ridge of the Udayagiri hill. A full and illustrated report will appear in the Director-General's *Archæological Annual*, but a summary of the results achieved will be found in Part II of this Report. The excavations at the first two sites were in every way a great success. The finds of genuine steel and of lime mortar on the Khām Bābā site are indeed very sensational discoveries (*infra*, pp. 59-60 and paras. 2-3). No archæologist would have ventured to assert that the Indians were conversant with the art of manufacturing steel and lime mortar of the best kind at such an early period as the second century before Christ. But the chemical analyses of these finds no longer leave any doubt on this point. A third equally interesting discovery on the Khām Bābā site was the remains of a canal of the Maurya (300 B. C.) or possibly pre-Maurya period (*infra*, pp. 61-62, para. 6). So long we had known about the existence of an organised irrigation system in ancient India only by inference from foreign accounts and epigraphic references. But the unearthing of this canal is actual and unmistakable evidence on the subject. The excavation of the mound in the heart of the ruined Vidiśā was equally successful. The most noteworthy feature of it was the discovery of three *yajña-kundās* or sacrificial pits of the 3rd century A. D. together with two spacious halls, indicating the existence of a *yajña-sālā* here. I am not aware of any *yajña-kundās* having been found so far anywhere in India. This and the fact that the sacrificial pits here exhumed are of an early period constitute it to be a unique discovery. What perhaps still further augments interest already great is the most probable fact, attested by a clay seal found on the spot, that the *kundās* were constructed for a sacrifice by an individual called Timitra, *i. e.*, Demetrius,—a Greek ! This fact need not surprise us as we already know that the Khām Bābā column at this very Vidiśā (Besh) was set up by a Greek, Heliodorus, who calls himself a *Bhāgavata* or devotee of the Hindu god Vāsudeva and was standing as a *Garuḍadhvaja* in front of a temple to this divinity close by.

20. After finishing my work at Besh I went to Tāṇḍo-Mahammad-Khān in the Hyderābād District, Sind. About six miles north
Tando-Mahammad-Khan.
by west of this place near Gājā mouth of the Fuleli Canals was a mound locally called Sudheran-jo dhāḍo,

containing the remains of a Buddhist *stūpa*. It was first inspected by Mr. Cousens in 1910 and two years later by me. Mr. Cousens very much wanted to excavate here, but as he retired from service soon after, it was not possible for him to carry out his intention. At his express desire, supported by the Director-General of Archæology, I undertook to open the mound before the last touring season expired; and though it was the second week of March and the hot season of Sind had commenced to make itself unbearable, excavation operations were started which came to a completion only at the end of that month. I am exceedingly obliged to Mr. C. O. Lowsley, Executive Engineer, Fuleli Canals, for having made all arrangements in regard to the necessary number of pick-axes and spades for our work, and, in particular, for having supplied me with the requisite number of labourers who had to be brought with great tact and coaxing. The mound of Sudheran was associated with a superstitious belief, shared by all local people—Muhammadans as well as Hindus. It was believed to be the dwelling-place of a cobra so fearful that its very hiss emitted fire and so stupendously long that from the mound it could easily elongate itself and reach the Gājā branch of Fuleli Canals to drink water when it felt thirsty! And the story again was in the mouth of the people that once upon a time a band of *bairāgis* came there with the express object of charming the cobra and snatching away the treasure which it jealously guarded. They had brought with them cart-loads of cow-dung cakes to counteract the fires from its hisses. And then they played upon flutes to lure it away from its hiding place. The cobra came out, and on beholding the *bairāgis* was so wrath that lo! with but one hiss he burnt them to ashes along with the cow-dung cakes they had brought. The slag pieces, with which the site here as far as one mile is profusely strewn, are pointed out by the people as evidence of the cobra's fury. It was, therefore, a very difficult matter to obtain coolies to work here, imbued as they were with this superstitious belief. And if it had not been for the help and support which Mr. Lowsley most cordially and unostentatiously gave, it would not have been possible for me to bring the excavations here to a speedy and successful termination. Part II contains an epitome of the results achieved (pp. 65-66, paras. 12-14). No discoveries of a sensational character, it is true, were made here; nevertheless these excavations have a peculiar interest of their own.

21. The preceding remarks relate to the excavations actually carried out, but my work in connection with exploration also leads me to visit places which offer likely sites for excavation.

Vasavaḍ.

Two such places I visited. One of these was Vasavaḍ in the Sorath Prānt, to which my attention was drawn by Mr. J. Sladen, Agent to the Governor, Kāthiāwār, who forwarded a note prepared by the Agency Educational Officer. The note began with: "Vasavaḍ is a place extremely rich in archæological remains. My hypothesis is that it was the capital of one of the Prānts into which the ancient Gupta monarchy had divided Kāthiāwār for purposes of administration". I visited the place in April 1914, and have to confess that I was a little disappointed on inspecting the antiquarian remains there which in the first place are few and secondly are scarcely earlier than the Solanki period. It is true that two miles from Vasavaḍ Gupta coins are reported to be found in the rainy season, but there is not a single mound which can be safely depended upon to yield antiquities of an early age or at any rate to produce results commensurate with the money that might be expended upon it. I wonder what led the Agency Educational Officer to surmise that it was the head-quarters of a Gupta District in Kāthiāwār.

22. The other place which I visited was Devki-Vansol in the Mehemadābād tāluka of the Kairā District. In October 1914 the

Devki-Vansol.

Collector of the district wrote to inform me that Sheth Bhailal Amratlal of Kairā had been granted permission to excavate the ruins of a Jaina temple at this village and asked me whether he should be allowed to remove the sculptures dug out by him. Thinking that some of the sculptures might be worth securing for the Prince of Wales Museum and intent upon knowing whether the site was promising for excavation, I visited Devki-Vansol at the beginning of March last. Here too disappointment awaited me. The objects exhumed were of the thirteenth century and of no importance whatever except one sculpture. This last is locally believed to be a Hanumān,

but, as a matter of fact, it is an image of Lakṣīṣa, the last incarnation of Siva. This I have requested the Collector to reserve for the Prince of Wales Museum as soon as its building is ready to receive it. There is just one remark which I wish to make in this connection, *en passant*. It is not clear how permission came to be granted to Sheth Bhailal Amratlal to excavate at Devki-Vansol. Fortunately the site was of no consequence, but if it had proved rich in antiquities, I am sure the excavation, carried out as it was by inexperienced and raw amateurs, would have been even worse than useless, because there are so many points which an expert notices during an excavation before their indications are effaced and these would all have been lost beyond recovery. It is for this reason that Government of India have distinctly laid down that no excavation will be permitted "except by thoroughly competent persons" (*vide* paragraph 7 of the Resolution of the Government of India quoted in the preamble of the Resolution of the Bombay Government, General Department, No. 4253, dated the 13th August 1903). It is, therefore, exceedingly desirable that no heads of districts should grant permission for excavation to any private individual or Society without first consulting the Archæological Department.

X.—EPIGRAPHY.

23. In my remarks on section VI (Museums) I have alluded to the Kshatrapa inscription stones lying in the State Museum at Bhuj in Cutch. The stones were no doubt seen by me nine years ago when I first visited Bhuj. But then I had no time to decipher the inscriptions. The letters are so curiously weather-worn that they do not yield even passable estampages, but it is possible to prepare satisfactory transcripts from the originals. Last time I had not sufficient time to make these transcripts, and had to content myself with giving a very brief account, indeed, of them. This season I was glad I could devote the time necessary for this work. There are two other Kshatrapa inscriptions, which also I was able to inspect this season. They are lying in the Watson Museum, Rajkot. They both have been published in the *Indian Antiquary*, one by Bühler in Volume X, page 157, and the other by Dr. Hoernle, in Volume XII, page 32. But their transliterations are far from satisfactory. There is one more Kshatrapa inscription whose transcript also has been prepared. The Bhuj inscriptions, as stated in one of my Reports, were originally found at Andhau in Khāvdā, also called Pachchham. While at Bhuj I heard that all the stones discovered at Andhau had been brought there except one, and that this one was still lying at the original find-spot. Accordingly I sent Mr. Dikshit to Andhau when I was to leave Cutch. The transliteration, which he prepared and which was checked by me with the help of his estampage, also be published in the *Epigraphia Indica* along with those of the other inscriptions. The publication of all these transcripts will, I believe, supply a long-felt desideratum amongst antiquarians studying the history of the Kshatrapa period. A summary, however, of the contents of all these epigraphic records will be found in Part II, pp. 66-67, paras. 15-16.

24. In the course of his touring in the Kanarese districts for the purpose of selecting antiquarian objects worth exhibiting in the Prince of Wales Museum, Mr. Dikshit was fortunate enough to find a set of three ancient inscribed copper-plates in the possession of a copper-smith named Mallappa in the village of Sāngoli near Bailhongal in Belgaum. They are a record of the Kadamba dynasty and have a special character of their own. A summary of this inscription also will be found in Part II, pp. 68-69, paras. 18-20.

XI.—NUMISMATICS.

25. In my last year's Report I have referred to the hoard of 2,393 Kshatrapa coins discovered at Sarwāṇī in the Bānswārā State, Rājputānā, and secured by me for inspection. This hoard has now been thoroughly examined by me, and I have contributed a detailed article on it together with an illustration to the Director-General's *Archæological Annual*. As this article will take long to publish, I have given in Part II, for the information of scholars and antiquarians, two tables—one classifying the coins and the other specifying the dates.

The new dates furnished by this lot are happily not few and throw a flood of light on the durations of some reigns

26. Appendix H contains the report of the Honorary Secretary to the Bombay Branch of the Royal Asiatic Society regarding the examination and distribution of coins acquired by Government under the Treasure Trove Act and also accounts, appearing in the *Government Gazette*, of the treasures found in the Bombay Presidency. The Collector of Kairā was the only officer who gave me information of the discovery of coins in the district as required by Government Resolution, No. 3407, General Department, dated the 1st July 1904. A particularly gratifying circumstance, however, was the dispatch, for my inspection, by the Udaipur and Kotāh Durbārs, of the numismatic finds in their States. An account of these also will be found in the same Appendix.

XII.—PROTECTED MONUMENTS.

27. During the year under report no less than 160 monuments were declared protected (Appendix K) as against 41 of the preceding. This is very satisfactory progress, indeed. Of these, 132 alone are from the Bijāpur District. In the case of seven monuments—four from Kairā and three from Ahmednagar, the sub-classification had to be changed. This sub-classification which indicates whether the monument is Government-owned or private property and which has invariably to be settled by the head of the district had to be revised by the Collectors of Kairā and Ahmednagar in regard to the seven monuments just referred to in the light of the information that became available last year.

28. A new feature introduced for the first time and by this Department is the inclusion of archæological buildings classed III in the list of monuments proposed for Government protection. Buildings of this class have no doubt been considered by Government as "monuments which from their advanced stage of decay or comparative unimportance it is impossible or unnecessary to preserve", and have so far been excluded from protection. It is true that such a monument because it is on the brink of becoming a total wreck, may not be worthy of any money being expended on its repairs, but if it is invested with historical associations or architectural interest, it most certainly deserves to be protected against the depredations of vandals and to be allowed to fall down by itself and in its proper time. This object can be realised only by its being brought under protection. Six such monuments were, therefore, declared protected during the year under review.

29. Only twelve agreements were executed with the owners of the monuments during the last year as against 43 of the previous. This progress though not very gratifying is by no means disappointing. This Department, however, is yet longing for the day when the Collector of Ahmedābād will be able to enter into such agreements with the owners or trustees of the monuments of the Ahmedābād City itself where it is impossible otherwise to prevent disfigurement to which monuments in this locality are particularly susceptible and enforce the necessary degree of cleanliness and tidiness.

XIII.—CONSERVATION.

(a) Bombay Presidency.

30. Particulars of the conservation work executed in the Bombay Presidency during the year under report will be found in Appendix

Works carried out.

L. Over and above the current repairs to a good many monuments, special repairs were either carried out or being carried out in the case of the temple of Ambarnāth, old Portuguese Fort and ruins at Bassein, and Kanheri caves in the Thānā District; Mubārak Sayyad's tomb at Sojali in Kairā; Kārli caves in Poona; Āsar Mahalla in Bijāpur and old temples of Aihole and Pattadakal in the Bijāpur District; temple of Doddā Basavannā at Dambal in the Dhārwar District; Isākhān's Zenana tombs on the Makli Hill and Jāmi Masjid of Taṭṭā in Sind. The conservation of most of these monuments has been in hand for the past few years, and anyone now visiting them cannot fail to be impressed with the fact that they now present a very orderly and cared-for appearance.

31. In November 1912 the Director-General of Archæology visited the ruins of Chāmpānir in Panch Mahāls and drew up detailed conservation notes. These were added to by Mr. Page when he inspected the monuments in March 1914. There was thus an exhaustive and systematic programme laid down for undertaking full and effective remedial measures for overhauling them and rendering them structurally sound. The Executive Engineer, Kairā and Panch Mahāls, was, thereupon, asked to frame the necessary estimates. This involved among other things the entertainment for three months at least of a full-time Overseer and his staff to make the preliminary survey of the site. Further, as the buildings were in the heart of a jungle, it was necessary to construct *kachcha* roads connecting them with one another and also to clear a space of at least fifty yards round about each monument. All these preliminary measures have been carried out, and the necessary estimates drawn up and approved. The next financial year will see the commencement of the repairs which will restore the monuments almost to their original condition.

32. In pursuance of the policy to visit, systematically in the different districts, all the monuments that have so far been declared protected, Mr. Page completed his inspection of them in the Ahmedābād, Kairā and Panch Mahāls Districts which were begun last year and then took up and finished that of the Surat and Broach Districts. He next undertook tours in North Kanara but was not able to complete his inspection as the touring season had far advanced. Printed copies of his proposals for the care and repairs to the monuments examined have been submitted to Government both in the General and Public Works Departments. His remarks on some of these monuments will be found also in Part III. His "Conservation Commentary" shows that the disfigurements and the unclean and slovenly surroundings which characterise the monuments of Ahmedābād and to which reference has been made in my last Report manifest themselves with equal prominence in other parts of Gujarāt, and, in particular, in regard to the tomb of Mubārak Sayyad in Sojālī, Kairā District (p. 75). So far as "pointing" is concerned, the Public Works Department subordinates are responsible, and steps can be easily taken to set matters right in this respect. But the other disfigurements and nuisances emanate clearly from the custodians and owners of the monument. Fortunately the Collector of Kairā has recently entered into an agreement with them, and there is every hope that things will rapidly improve here. Such has not yet been the case with any of the Muhammadan buildings at Ahmedābād, and it is extremely desirable that similar agreements are executed there. The only question that is likely to give some trouble is the ubiquitous limewhite. No divergence of opinion is possible with regard to the desirability of its removal. But it must not be forgotten that the local Muhammadans have a strong predilection for limewhite, as, it must be admitted, many of those responsible for the upkeep of old Gothic churches in England still have. Accordingly the question must be handled with due sympathy for the Muhammadan feelings. No civil authorities, I admit, will ever assent to any wholesale campaign against this limewhite, and I am inclined to think that the best course will be to get one or two structures cleaned each year after their owners have duly signed the necessary agreements and educate local taste in the matter without creating any stir about it or evoking organised opposition.

Limewhite.

33. I am sorry I have to report to Government the complete destruction of a monument in Sind which had been declared protected. Four Jaina temples at Bodesar in the Thar and Pārkar District were declared protected monuments by Government Resolution No. 2704, General Department, of the 26th May 1909, and were classed II (a), the sub-classification (a) showing that they were Government property. In 1913, however, the Firm of Sheth Anandji Kalianji, as trustees of the Jaina temples, laid claims to their ownership, which was acknowledged by Government in their Resolution No. 3541, General Department, dated 5th May 1914, by the change of the sub-classification. Estimates for their repairs were duly framed by the Executive Engineer, Eastern Nārā District, approved by this Department, and placed in the hands of the Overseer engaged by and represen-

Vandalism.

tative of the Firm, who, being the owners of the temples, had promised to carry out the repairs themselves. In January the Collector of Thar and Pärkar was kind enough to visit these monuments and see in person how the repairs there were being actually executed. "As regards Temples Nos. 2, 3, 4," he writes, "I regret to say that this same man (the Jaina Overseer) has done a great deal of mischief. *To begin with his worst offence he has utterly demolished Temple No. 2 in order to provide stone with which to repair temples 3 and 4.* Even as regards these last, he has neglected the estimates drawn up by the Public Works Department and approved of by your department and has attempted to go beyond them. For instance in Temple No. 3 he has built up the wall to its original height over the two main entrances using stones from the demolished temple and ordinary bricks, which produces a most unsightly effect. The pointing to this and in No. 4 is disgracefully bad, the plaster being smeared broadly over the surface of the wall. In temple No. 4, an unsightly plastered column has been erected inside to support a portion of the roof, though this was not provided for in the estimates. Lastly the compound wall surrounding temples 2 and 4 has been entirely coated with plaster so that the original stone is entirely invisible. The effect is most unsightly and incongruous". Vandalism and contempt for art cannot farther go. Fortunately the monuments are not of first class importance. I am glad the work has been stopped by the Collector, pending its inspection by an archaeological officer. Mr. Page may possibly visit the temples next cold season, and see what further steps are needed.

34. The list of works to be undertaken during the year 1915-16 is contained in Appendix R. I am glad that for this year too Government in the Public Works Department has sanctioned a grant of Rs. 30,000 for the conservation of archaeological buildings and remains. It is, however, to be borne in mind that during 1915-16 no less than 218 monuments will be conserved as against 92 which were repaired in 1902 when the conservation work of the Presidency was for the first time placed on a systematic footing. Even this number is nothing as compared to that of the monuments which have been declared protected and regarding the care and preservation of which Government have consequently acknowledged their responsibility. More funds are, therefore, absolutely necessary, and will, I have no doubt, be forthcoming as soon as finances are restored to their normal condition.

35. This year only six inspection reports were received, *viz.*, from the Executive Engineers of the Ahmednagar, Nāsik, Sholapur, West Khāndesh, Nāsrat Canals and Eastern Nāra Districts, those of the last two officers being sent through the Superintending Engineer, Indus Left Bank Division (Appendix O).

36. In usual routine all repairs to archaeological monuments are either proposed or approved by Officers of the Archaeological, and executed by those of the Public Works, Department. Where the Executive Engineers have been able to bestow personal attention, these repairs have always been carried out in an exceedingly satisfactory manner. But owing to the manifold and onerous duties they very often have to discharge, they are not in a position to exercise personal supervision especially when the monuments are far removed from the head-quarters of the districts. In such cases the work is begun and completed by the lower subordinates according to their lights and without any personal guidance, with the result that limewash, pointing and other eyesores are frequently found to disfigure the archaeological buildings. The only way out of this difficulty was the selection of special sub-overseers for the execution of such repairs and their training by the Conservator of each Circle in the requirements peculiar to the archaeological conservation. A recommendation to this effect was actually made to the Government of India by the Conference of Orientalists held at Simla in July 1911. The Government of India was disposed to agree with this view and approached the Bombay Government on the subject. The Public Works Department of this Presidency was, however, found to have already more work on hand than its existing staff could conveniently undertake, and it was not, therefore, possible to spare any men from the Sub-overseer class for conservation purposes. But the Bombay Government in the Public Works

Department, with their characteristically sympathetic attitude towards archæology, agreed to make an addition to the Sub-overseer staff corresponding to the number of men required for specialisation in the conservation of archæological monuments. And it is a matter of exceedingly great delight that in accordance with Government Resolution No. E-2506, Public Works Department, of the 27th February 1915, four sub-overseers have actually been appointed and temporarily posted at (1) Ahmedābād, (2) Chāmpānir, (3) Bijāpur and (4) Dhārwar. This has supplied a long-felt want, and archæological conservation will in future have the advantage of being carried out by trained subordinates.

37. The Superintending Engineer, Central Division, Poona, reports that experiments for destroying stumps with a mixture of nitrate and sulphuric acids were made by all the Executive Engineers in his Division, except those of Ahmednagar and East Khāndesh Districts and the majority of them consider the results satisfactory. The Executive Engineer, West Khāndesh, remarks: "the stump was softened to a considerable extent, but it was not so destroyed as to be easily removeable. I hope to make experiments myself very shortly when a further report will be made". This is very interesting especially as the results of the experiments made by three other Executive Engineers of the Presidency were rather disappointing, as will be seen from Appendix R (pp. 52-53) of my last Progress Report.

38. In paragraph 47, page 11 of my Progress Report for the year ending 31st March 1913, I have stated that during that year I recommended the use of a composition called Meyer's stone cement to be had at Messrs. Garlic and Co., Bombay, to the various Executive Engineers of the Presidency with a view to making experiments especially in the case of archæological buildings. In 1912-13 the Executive Engineer, Belgaum, put it to test, the favourable results of which have been alluded to in that Report. No communication was received on this subject from any of the Executive Engineers during 1913-14. But, during the year under review, reports were received from no less than five of these officers. They have all been embodied in Appendix P. No doubt can now be entertained in regard to the extreme usefulness of the composition. Its high cost, however, is against its being used for any but the most important of works.

(b) Native States in the Bombay Presidency.

39. Whilst at Junagadh, last year, I supplied the Darbār with a short conservation note upon the Uparkoṭ and Khāprā Kodiyā caves and also those near Bāvā Pyārā Math, and I am exceedingly glad to record here the following information received from Mr. H. D. Rendall, I. C. S., Administrator, Junagadh. The Junagadh Darbār has "taken all necessary steps both for the Khāprā Kodiyā and Bāvā Pyārā Math as well as Uparkoṭ caves at a total cost of over Rs. 2,000. All refuse and earth has been removed to a great depth and jungle growth has been cleared. The enclosures have been built up, and a road provided". The whole credit is due to Mr. Rendall, the enlightened Administrator, who has left no branch of activity unattended to in his *régime*.

(c) Baroda State.

40. In paragraph 19 *supra*, I have alluded to the genuine anxiety evinced by the Baroda Darbār for the conservation of the ancient monuments of the State. A systematic scheme of conservation involves (1) the preparation of the list of archæological buildings previously unexplored and (2) recommendations for the repairs and upkeep of those which are already known. Of the initiation and progress of the former kind of work undertaken by this Department, I have already informed Government in the paragraph referred to above. To achieve the second object Mr. Page was instructed to visit all the archæological places described by Dr. Burgess and Mr. Cousens in "North Gujarāt" which constitutes Volume XXXII of the Archæological Survey of India (New Imperial

Series). He accordingly inspected the monuments at Siddhapur, Modherā, Pāṭaṇ, Sūnak and Dilmāl which are all in the Kādī District. Copies of the conservation notes he drew up have already been submitted to Government.

41. Mr. Page also visited Dabhoi in the Baroda District, whose antiquities have been described by Dr. Burgess in a volume published at the expense of the Baroda State. This visit was of paramount necessity. My draftsman who was entrusted with the work of preparing an inventory of the monuments of the State was touring in the Baroda District, and during the course of this work came to Dabhoi where he was dismayed to find the citadel walls being demolished. He forthwith apprised me of the fact. Thereupon I at once put myself in communication with Mr. Coyle, Chief Engineer, Baroda State, and requested him, if it were possible, to stop this work of destruction till the place was visited by an Archæological Officer, and as Mr. Page had shortly before received sanction to tour in the State, he was asked to go and see personally what damage had been effected there. The walls of the square-planned citadel of Dabhoi, it appears, had for the past three years been given over to building contractors for the purpose of obtaining stones to be used in the erection of the various buildings of the State. When Mr. Page was there, little, indeed, remained of them, and what remained was in unrelated fragments, rising here and there from among the general dismantled debris. The portion of the wall unaffected by these operations was that flanking the "Baroda Gateway". This is much to be regretted, for apart from historical associations, the effect of the interior treatment—with its ranging length of trabeated colonnade stretching as a sheltered way far into the distance to right and left—must have been as architecturally impressive as it is unusual in the examples of fort or citadel wall architecture left to us at the present day. The only recommendations that were possible under the circumstances were made to the Darbār. One was to repair and maintain intact the preserved portion of the wall immediately flanking the "Baroda Gateway", and the other was to dismantle the odd fragments remaining but to prohibit all demolition of the remaining length of the gapped and broken wall below a lozenge-patterned band defining the plinth. The preservation of this outlined base will lend evidence of the existence of a previous wall and give some significance to the fine old gateway centred within its length.

(d) Central India.

42. No conservation work appears to have been accomplished in Central India except at Dhāmnār in the Indore, Sānchī in the Bhopāl, and Dhār and Maṇḍu in the Dhār, State. An account of the repairs carried out at these places will be found in Appendix M. That at Dhamnār Caves was of the nature of current repairs. The work at Sānchī was of an entirely different kind and executed under the personal supervision of the Director-General of Archæology. A detailed account of it will duly appear in his Report. Mr. Page also was at Sānchī for about a month to help him. What work he was able to carry through has been described by him in Part III of this Report, p. 83, paras. 133-5. In the Dhār State also beyond current repairs, very little of a special character was done, and what little was done was carried out in regard to the Jāmi Masjid of Maṇḍu. The restoration of the front door of the porch of this monument referred to in my last but one year's Report (page 11, paragraph 50) has just commenced. The marble to be used was selected by the Director-General of Archæology when he was at Maṇḍu in February last, and arrangements have been made to secure the required blocks from Makrāṇā. The work, it is hoped, will be complete by the end of the next year.

(e) Rajputana.

43. So far as Rājputānā is concerned, thanks to the Director-General of Archæology, two new places have been added to my Circle for conservation purposes, *viz.*, Ajmer and Bayāṇā in the Bharatpur State. The preservation of the ancient monuments of Ajmer had from the very beginning been entrusted to the Superintendent of the Northern Circle, but under orders of the Government of India

Transfer of Ajmer and Bayana
to Western Circle.

printed in the preamble of the Resolution of the Bombay Government, No. 5999, General Department, of the 30th July 1914, it has now been transferred to the Western Circle. This is but natural, for when the whole of Rājputānā was comprised in this Circle, the exclusion of merely Ajmer from it was something of an anomaly. Economy and convenience also are decidedly in favour of the new transfer. In regard to Bavāṇā, it was originally included in the Western Circle, but had to be temporarily made over to the Northern Circle a few years ago. I am glad it has now been restored to my circle.

44. A brief account of the inspection made by Mr. Page of the Rājputānā monuments during the year under review will be found in Part III of this Report. Appendix N contains a statement of the conservation work accomplished in Rājputānā. It will be seen from it that during this and in the preceding year the work of repairing ancient monuments was executed only in two places, *viz.*, Dilwārā on Mount Ābū and Bayāṇā in the Bharatpur State. The repair of the Dilwārā temples was carried out by the Jaina Community principally in accordance with their ideas and inclinations without any control by this Department. As might be expected under such circumstances, there has not only been restoration of the missing, but, what is worse, replacement of the already existing members. The custodians of the temples seem to be averse to fractured lintels being supported by angle irons along the edges, though the lintels contain excellent sculptures and this device is most effective and very unobtrusive, and appear to be inordinately fond of substituting for them new ones of very indifferent workmanship as compared with the old. When Mr. Page was there in November last, he took two photos.—one of an old dismantled *hathi* frieze and another of its reproduction in the old position. One does not need much subtlety of perception to apprehend the anatomical and artistic defects of the new work. It is a great pity that these temples which are gems of their kind are thus being gradually shorn of their deep, vigorous and artistic old work. The temple custodians were open to persuasion ten years ago, and I am sure they can again be induced to show some consideration for archæological ethics if the higher authorities step in and represent to them the enormous loss archæology and art will sustain by the pursuance of their present replacement policy.

45. The repairs to the old monuments of Bayāṇā have been in progress for a good many years and are being carried out in accordance with the conservation notes of the Director-General of Archæology. These also have not in every case been of a satisfactory nature, especially in regard to the Jāmi Masjid, though they have been extensively executed. The quality of the delicate and intricate work, where restored, falls conspicuously short of the original. There is one restoration, again, which calls for stringent criticism. This concerns the over-sized capital inserted in the lower north colonnade. Here, instead of chiselling a capital to fit into the space left by the removal of the old one, the three meeting lintels which it supports have each been cut back for some two inches in their depth to accommodate the new capital! Instances of this nature show how very necessary it is that close supervision be exercised in the repair of an archæological monument.

XIV.—TOUR PROGRAMME FOR 1915-16.

46. About the beginning of November 1915, I propose running up to Nagari, 11 miles north of Chitorgaḍh in the Udaipur State, Rājputānā, where I wish to start my exploration work of the season. Nagari is a very ancient place, as attested by the coins and sculptures found there. Its antiquarian remains have been described in Cunningham's *Archæological Survey Reports*, Vol. VI, by Carlleyle, who lays special stress on two or three mounds which to all outward appearances appear to contain the ruins of Buddhist *stūpas*. The Udaipur Durbar has been so kind as to grant me the necessary permission to conduct exploration work here, and I intend opening these mounds and excavating at any other sites that may seem promising. It is impossible to say at present how long this work will detain me, but in all likelihood I shall be occupied with it till the middle of January 1916. After finishing my work here, I intend going to Junāgaḍh in Kāthiāwār to under-

take exploration in that State also. The Junāgaḍh State abounds with antiquities and ancient sites fit for excavation, and Mr. Rendall, the Administrator, has shown anxiety to have systematic and scientific excavation carried out in the State, and I have for the present decided to concentrate my attention on an old deserted place in a valley six miles from Junāgaḍh. It is here that the locally celebrated temple of Bṛiṃā devī and Lākḥā Mēḍhī are situated, and it was here that the late Sir James Campbell in 1888 opened a *stūpa*, the finds of which have now been exhibited in the State Museum. The ground here is thickly strewn over with ancient bricks and pottery to a distance of at least one mile and a half. As there are no surface indications of any old structure in these ruins where excavations would be worth carrying out, I intend taking trial pits at different places to enable me to settle as to where I should persevere for substantial results. The Baroda State is also desirous that I should undertake exploration at the ancient places of Kārvāṇ and Pāṭaṇ and has agreed to provide for the necessary funds during the year 1916-17. It is, therefore, essential that I should inspect these places beforehand and select mounds for excavation purposes. These places I shall therefore have to visit next cold season. If any time is afterwards available, it will be utilised in undertaking a tour in the Jaipur State with a view to make further progress in the Listing work of Rājputānā which I had taken up when I was Assistant Superintendent. In addition to these there are likely to be, as in the past, unforeseen calls to other places.

47. Now that Sub-overseers have been appointed for conservation purposes, as stated in paragraph 36 *supra*, it has become a matter of very great importance to train them in the special work for which they are intended if they are to be of any real service to archæology. Mr. Page will, therefore, commence his touring season with visiting Chāmpānir, Ahmedābād, Bijāpur and Dhārwar where they have at present been posted and impart to them the necessary training in the very course of the execution of the special repairs which they will have to carry out there. At Chāmpānir Mr. Page will be engaged also in re-setting Sir Francis Fox's grouting machine which, as said in paragraph 35, page 8 of last year's Progress Report, Government in the Public Works Department have been so generous as to purchase for the benefit of archæological monuments and which has been sent there as its use is at present needed more urgently at Chāmpānir than at any other place. He will also have to teach the Sub-Overseer there how to handle the machine so as to use it to the best advantage.

48. Pursuant to the scheme of inspecting systematically all the monuments of the different districts which have been declared protected, Mr. Page will complete the Kārwar District which he had taken up last year and then tour in the Belgaum District and afterwards in Sind, the archæological buildings of which both have for long been not inspected by an archæological officer.

D. R. BHANDARKAR, M.A.,
Superintendent, Archæological Survey, Western Circle.

Poona, 1st August 1914.

APPENDICES.

APPENDIX A.

Superintendent's Diary.

1914.

April	1st to 6th	... At headquarters.
	7th	... Poona to Bombay.
	8th	... Halt at Bombay.
	9th	... Bombay to Poona.
	10th to 15th	... At headquarters.
	16th to 18th	... Poona to Vasāvaḍ in Kāthiāwār.
	19th	... Halt at Vasāvaḍ.
	20th to 21st	... Vasāvaḍ to Ajmer.
May	29th to 30th	... Ajmer to Mandsaur.
	1st to 4th	... Mandsaur to Poona.
	5th to 18th	... At headquarters.
	19th	... Poona to Bombay.
	20th	... Halt at Bombay.
	21st to 25th	... At headquarters.
	26th	... Poona to Bijāpur.
	27th	... Halt at Bijāpur.
August	28th	... Bijāpur to Poona.
	29th to 6th	... At headquarters.
	7th	... Poona to Bombay.
	8th	... Bombay to Poona.
	9th to 17th	... At headquarters.
October	18th	... Poona to Bombay.
	19th	... Halt at Bombay.
	20th	... Bombay to Poona.
	20th to 28th	... At headquarters.
	29th	... Poona to Bombay.
	30th to 2nd	... Halt at Bombay.
November	3rd	... Bombay to Poona.
	4th to 12th	... At headquarters.
	13th to 14th	... Poona to Rājkoṭ.
	15th to 17th	... Halt at Rājkoṭ.
	18th	... Rājkoṭ to Junāgaḍh.
	19th to 22nd	... Halt at Junāgaḍh.
	23rd	... Junāgaḍh to Verāvaḷ.
	24th to 26th	... Halt at Verāvaḷ.
December	27th	... Verāvaḷ to Bhāvnagar.
	29th to 30th	... Halt at Verāvaḷ.
	1st	... Bhāvnagar to Hāthab.
	2nd	... Halt at Bhāvnagar.
	3rd	... Bhāvnagar to Vaḷā.
	4th to 5th	... Halt at Vaḷā.
	6th to 7th	... Vaḷā to Bhuj.
	8th to 10th	... Halt at Bhuj.
	11th to 14th	... Bhuj to Bhilsā for Besh.
	15th to 16th	... Halt at Besh.
	17th to 18th	... Besh to Ajmer.
	19th	... Halt at Ajmer.
	20th to 21st	... Ajmer to Besh.
	22nd to 29th	... Halt at Besh.
	30th to 31st	... Besh to Poona.

1915.

January	1st to 2nd	... Halt at head quarters.
	3rd	... Poona to Bijāpur.
	4th	... Halt at Bijāpur.
	5th to 7th	... Bijāpur to Besh.
February	8th to 9th	... Halt at Besh.
	10th to 11th	... Bhilsā to Ajaṇṭā, to meet Director-General of Archæology
	12th to 14th	... Halt at Ajaṇṭā.
	15th to 16th	... Ajaṇṭā to Besh.
	17th to 23rd	... Halt at Besh.
	24th to 25th	... Besh to Indore.
March	26th to 3rd	... Halt at Indore.
	4th	... Indore to Mehmedābād.
	5th	... Halt at Mehmedābād.
	6th to 7th	... Mehmedābād to Tāndo-Mahammad-khān (Sind).
	8th to 31st	... Halt at Tāndo-Mahammad-khān.

Assistant Superintendent's Diary.

1914.

- April** 1st to 7th ... Halt at Sānchi.
 8th to 10th ... Sānchi to Baroli *via* Koṭāh.
 11th to 14th . Halt at Baroli.
 15 to 16th . Baroli to Poona.
 17th to 19th At headquarters.
- May.**
May 20th ... Poona to Mahābleshwar.
 21st ... At Pratapgarh.
 22nd ... Pratapgarh to Poona *via* Mahābleshwar.
 23rd to 17th At headquarters.
- June.**
June 18th ... Poona to Nāsik.
 19th ... Visit to Sinnar.
 20th ... Nāsik to Poona.
 21st to 24th... At headquarters.
 25th ... Poona to Gadag.
 26th ... Visit to Dambal.
 27th ... Gadag to Poona.
 28th to 6th At headquarters.
- August.**
August 7th ... Poona to Bombay and back.
 8th to 12th At Head-quarters.
- October.**
October 13th to 14th... Poona to Ahmedābād.
 15th to 16th... Halt at Ahmedābād.
 17th ... Ahmedābād to Dholkā.
 18th to 20th . Halt at Dholkā.
 21st to 22nd . Dholkā to Surat.
 23rd to 24th . Halt at Surat.
 25th ... Surat to Broach.
 26th to 27th . Halt at Broach.
 28th ... Broach to Kapadvanj.
 29th to 2nd Halt at Kapadvanj.
- November.**
November 3rd ... Visited Kankanpur and proceeded to Nadiād.
 4th to 5th ... Halt at Nadiād.
 6th ... Nadiād to Siddhapur (Baroda State).
 7th to 9th ... Halt at Siddhapur.
 10th ... Siddhapur to Mount Ābū.
 11th to 17th . Halt at Mount Abū.
 18th ... Mount Abū to Mārwarz.
 19th ... Visit Auwa.
 20th ... Mārwarz to Jodhpur.
 21st to 22nd. Jodhpur to Kirādu.
 23rd ... Kirādu to Mārwarz.
 24th ... Halt at Mārwarz.
 25th ... Mārwarz to Ajmer.
 26th to 2nd Halt at Ajmer.
- December.**
December 3rd to 4th ... Ajmer to Bāyaṇā.
 5th to 15th ... Halt at Bāyaṇā.
 16th to 18th . Bāyaṇā to Khajrāha *via* Harpālpur and Chhatarpur.
 19th to 21st . Halt at Khajrāha.
 22nd ... Khajrāha to Rājgad.
 23rd to 24th . Halt at Rājgad.
 25th to 28th . Khajrāha to Sānchi.
 29th to 22nd Halt at Sānchi.
- January 1915.**
January 23rd to 24th . Sānchi to Mhow.
 25th to 26th . Mhow to Bāgh *via* Sardārpur.
 27th to 2nd Halt at Bāgh.
- February.**
February 3rd ... Bāgh to Sardārpur.
 4th to 5th ... Sardārpur to Mhow.
 6th to 7th ... Mhow to Dabhoi.
 8th to 11th ... Halt at Dabhoi.
 12th ... Dabhoi to Ahmedābād.
 13th to 15th . Halt at Ahmedābād.

Serial Number.	Place.	Position of inscription.
2714	Sunak	... On a pillar in the small ruined temple.
2715	Do.	... Below the image in the small ruined temple.
2716	Bilgi	... On the slab in the Pārśvanāth basti.
2717	Do.	... On another slab in the do. do.
2718	Do.	... On a slab in the Virūpāksha temple.
2719	Arishibidi	... On a slab in a ruined temple.
2720	Do.	... On another slab in do.
2721	Do.	... On the slab laying outside of the ruined temple.
2722	Do.	... On a large slab lying towards the south-east of the ruined temple.

APPENDIX E.

Annual Expenditure of Survey : Expenditure on Salaries, 1914-15.

			Rs.	a.	p.	Rs.	a.	p.
Salaries—								
Superintendent	...	...	...	6,762	14	6		
Assistant Superintendent	...	...	...	5,080	10	4		
Establishment	...	...	...	5,031	1	4		
Temporary Establishment	...	...	...	8	0	0		
Plague Allowances	...	...	...	60	0	0		
			Total	...		16,942	10	2
Travelling Allowances—								
Superintendent	...	...	...	2,355	6	0		
Assistant Superintendent	...	...	...	2,099	2	0		
Establishment	...	...	...	2,436	14	6		
			Total	...		6,891	6	6
Supplies and Services—								
Excavations	...	...	...	2,311	15	0		
Photography and Photo material	...	...	...	728	11	6		
Purchase of, and repairs to, tents	...	...	...	879	7	9		
			Total	...		3,920	2	3
Contingencies—								
Stationery	...	...	...	68	8	0		
Books	...	...	...	122	0	6		
Liveries	...	...	...	46	12	0		
Rents, Rates and Taxes	...	...	...	56	0	0		
Postage and Telegram Charges	...	...	...	331	11	0		
Conveyance of kit, etc.	...	...	...	845	4	3		
Purchase of, and repairs to, furniture	...	...	...	165	15	0		
Pay of Menials	...	...	...	10	0	0		
Miscellaneous	...	...	...	337	0	9		
Purchase of Instruments	...	...	...	76	4	0		
			Total	...		2,059	7	6
			Grand Total	...		29,813	10	5

APPENDIX F.

The following is the list of books added to the office library during the year 1914-15 :—

- Archæological Survey of India, Annual Report, Part II, for 1909-10.
- Archæological Survey of India, Annual Report, Part II, for 1910-11.
- Annual Progress Report of the Superintendent, Muhammadan and British Monuments, Northern Circle, for the year ending 31st March 1914.
- Annual Progress Report of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, for the year ending 31st March 1914.
- Annual Report of the Archæological Survey of India, Frontier Circle, for 1913-14.
- Report of the Superintendent, Archæological Survey, Burma Circle, for the year ending 31st March 1914.
- Annual Report of the Archæological Survey of India, Eastern Circle, for 1913-14.
- Buddhism by Rhys Davids.
- Purāṇa Text of the Dynasties of the Kali Age by F. E. Pargiter.
- Viśvakarmā, Parts VI—VIII, by A. K. Coomarasvamy.
- Journal of the Bombay Branch of the Royal Asiatic Society for 1913.
- Annual Report (1912-13 and 1913-14) of the Watson Museum of Antiquities, Rājkoṭ.
- Bureau of American Ethnology, Bulletin No. 56.
- Blue Book Quarterly, 2nd and 3rd Quarters, 1914.
- Early History of India, 3rd Edition, by V. A. Smith.
- Memoirs of Baber by A. S. Beveridge.
- Hutchinson's History of Nations, Parts III, IV and V.
- Report of Nāgpur Museum for 1913-14.
- Buddha Story in Stone by H. Hargreeves.
- Annual Report of the Working Committee of the Rājputānā Museum, Ajmer.
- Preservation of Antiquities by F. Rathgen.
- Harivaṁśa.
- Bhavishya Mahā-Purāṇa in 3 Volumes.
- Vishṇu Purāṇa.
- Matsya Purāṇa.
- Antiquities of India by Lionel D. Barnett.
- Reportoire D'Art et D'Archæologie, 1914.
- Report on coins dealt with under the Treasure Trove Act in the Central Provinces during 1913-14.
- List of Coins in the McMahon Museum, Quetta.
- Antiquities of Indian Tibet, Part I, by A. H. Francke.
- Coorg Inscriptions (revised) by B. Lewis Rice.
- Bihar and Orissa Archæological Manual.
- Indian Antiquary (current numbers).
- Epigraphia Indica (current numbers).
- Epigraphia Moslemica.
- Journal of Indian Art and Industries (current numbers).
- Journal of the Royal Asiatic Society, London (current numbers).
- Bombay Quarterly Lists.

APPENDIX G.

List of Coins and Antiquities acquired by different Museums.

LIST OF ANTIQUITIES PRESENTED BY THE BHAVNAGAR DARBAR TO
THE PRINCE OF WALES' MUSEUM, BOMBAY.

King's name.	Father's name.	Title.	Metal.	Number of coins.	Date.	Remarks.
Vāsishthīputra Sāta-karṇī.	}	}	AR	1	...	Oblong Kārshā-pana with various symbols.
			Æ	1	...	
Sāmantadeva	...	...	AR	5	...	Gadhaiya coins.
Dāmajadaśrī I	Rudradāman I	MK	"	1	No date.	Horseman and bull type.
Rudrasīmha I	Do.	"	"	1	104	
				1	114	
Rudrasena I	Rudrasīmha I	"	"	2	134	x=4 to 9.
				1	13[x]	
Dāmasena	Do.	"	"	1	141	x=4 to 9.
				1	14[x]	
Prīthvisena	Rudrasena I	K	"	1	144	
Vīradāman	Dāmasena	"	"	1	15[x]	x=6 to 9.
Yaśodāman I	Do.	"	"	1	160	Much damaged.
				2	161	
				4	16[x]	
				2	162	x=0 or 1 or 2.
				1	164	
Vijayasena	Do.	MK	"	2	165	
				1	166	
				2	169	x=8 or 9; date is very faint.
				1	16[x]	
Dāmajadaśrī III	Do.	"	"	1	177	
Rudrasena II	Vīradāman	"	"	1	177	
				1	188	
Viśvasīmha	Rudrasena II	K	"	1	19[x]	x=8 or 9.
	Do.	MK	"	1	200	
				1	209	
Bharṭṛidāman	Do.	"	"	3	214	
				1	215	
				1	Illegible.	
				1	215	
Viśvasena	Bharṭṛidāman	K	"	1	216	
				1	21[7 ²]	
Rudrasīmha II	Jīvadāman	"	"	1	220	
Yaśodāman II	Rudrasīmha	"	"	1	235	
			"	1	241	
			"	1	272	
			"	1	290	
Rudrasena III	Rudradāman II	MK	Lead	1	[2]92	Square coin of bull type.
			AR	1	29[3]	
			"	1	2[9]6	
Kumāragupta I	(Chandragupta II)	"	"	13	...	Usual type.

Two stone sculptures (not yet received).

Two copper-plate grants, each consisting of two plates. One of these is from Timānā and was issued by the Mehara *Rājā* Jagamalla during the reign of the Chaulukya *Mahārājādhirāja* Bhimadeva II (*Indian Antiquary*, Volume XI, page 337). The other is a Valabhi grant of king Dhruvasena I dated Valabhi-Samvat 210.

LIST OF ANTIQUITIES PRESENTED BY THE VALA DARBAR
TO THE PRINCE OF WALES' MUSEUM, BOMBAY.

- (1) Bronze image of Buddha with halo as back ground, standing on circular lotus-seat, over square pedestal (height 10"); the protuberance of the skull (*ushnīṣa*) and long ear-lobes well marked out; hair treated in ringlets; right hand broken; left one hanging at side; clad only in a lower garment (*saṅghātī*), which reaches almost to the ankle, and is tied in a knot about the waist.

Inscription on pedestal in characters of the 6th century A. D.

. *dharmmaya pra-ti-(mū) Maghayaṇasa.*

- (2) Bronze image (height 7") similar to above but with the pedestal and halo gone; hands at side; drapery treated as above.
- (3) Bronze image (height 7·4") on pedestal, but with the disc lost, similar to above; hands at side, face somewhat worn; also inscription on pedestal.
- (4) Bronze image (height 7") with halo at the back of the head; standing on pedestal; broken about the knee; similar in style to the above; inscription on pedestal illegible.
- (5) Bronze image (height 6") without halo; similar to above, in good preservation.
- (6) Steatite statuette (5·5" height) of the goddess Durgā, four-handed, in the action of killing the demon Mahishāsurā.
- (7) Small stone pedestal (2" square and 1" height) intended as a seat for a Śivaliṅga.
- (8 to 10) Three silver coins of Kumāragupta of the Imperial Gupta dynasty.
- (11 and 12) Two copper coins of Kumāragupta of the Imperial Gupta dynasty.

The Honorary Secretary of the Bombay Branch, Royal Asiatic Society, Bombay, favoured me with a copy of the Annual Report of the Society for 1914, in which it is stated that "the number of coins added to the Coin Cabinet during the year was 38. Of these one was gold, 19 silver, 14 copper and 4 lead. Of the total 6 were presented by the Dewās Durbār, 2 by the Durbār of Akalkot, 11 by the United Provinces Government, 6 by the Central Provinces Government, 8 by the Madras Government, and the rest were acquired under the Treasure Trove Act.

The coins are of the following description:—

SOUTH INDIAN (GOLD).

- 1 Nawab of Cuddappa. Mint Kharpa or Cuddappa.
(Presented by the Madras Government.)

SULTANS OF DELHI (SILVER).

- 1 Qutbuddin Mubarak I. Khilji.
(Presented by the United Provinces Government.)

MUGHAL COINS (SILVER).

- 2 'Ālamgīr II. Mint Benāras (I).
(Presented by the United Provinces Government.)
- 6 Shāh 'Ālam II. Mint Benāras.
(Presented by the United Provinces Government.)

COINS OF GUJARATH SULTANATE (SILVER).

- 2 Maḥmud Shah I.
(Found at Halol, Panch Mahals District.)
- 3 Muzaffar II.
(Found at Halol, Panch Mahals District.)

FRENCH COLONIAL (SILVER).

Mahe $\frac{1}{5}$ Rupee.*(Presented by the Madras Government.)*

ROMAN COINS (SILVER).

1 Dinarius of Augustus.

1 Dinarius of Tiberius.

(Presented by the Madras Government.)

2 Punch-marked (silver).

(Presented by the Akalkot Durbar.)

BAHAMANĪ KINGS OF KULBARGA (COPPER).

1 Aḥmad Shāh I.

1 Humāyūn Shāh.

1 Muḥammad Shāh II.

1 Muḥammad Shah II (?).

1 Kalīm Ullāh.

(Presented by the Central Provinces Government.)

SULTANS OF DELHI (COPPER).

2 Fīroz Shah III (Tughluq).

(Presented by the United Provinces Government.)

6 (Copper) struck by some Native States in the name of Shāh 'Ālam II.

(Presented by the Dewas Durbar.)

4 Āndhra Coins (lead).

(Presented by the Madras Government.)

The Curator and Secretary, Victoria and Albert Museum, has supplied me with a typed copy of the Annual Report of his Museum in which it is stated that "Three photographs of Nasik Caves were purchased and framed, and now hung upon the walls in the archæological section."

"Three Memorial tablets bearing inscription in English, Gujarati and Urdu were removed from the site of the Nabbi's tank in Majgaon and lodged in the Museum under orders from the Municipal Commissioner, as the tank is now filled in. From the inscription it appears that the work of digging the tank was commenced in the year 1789 under the Government of His Excellency Major General Meadows and completed in the year 1790. The tank was dug as a memento of the regard and esteem held for Sir Edward Hughes, K.B., Rear Admiral of the Blue and Commander-in-Chief of His Britannic Majesty's Squadron in the East Indies, by His Highness Ayzulla Khan Bahadur Hayazi Dowlah Haffer Jung Nabab of Bednore."

The following is the list of coins, etc., received for the Archæological Museum, Poona, during the year 1914-15 :—

GOLD COINS.

1 of Pratāpadevarāya, found at Khed in the Poona District.

1 of Venkaṭa of Vijayanagar.

SILVER COINS.

1 of Shāh 'Ālam II found in the Gazīpūr District, United Provinces.

1 found in the Lucknow District, United Provinces.

1 of Aurangzeb, of Surat mint. Dated 1091—23.

1 Do. do. Dated 1093—25.

1 of Shāh 'Ālam I. Dated 3.

1 Do. Dated 2.

} Found in the Fyz-
abad District,
United Prov-
inces.

- 1 of 'Alamgīr II, of Benāras mint. Dated 1174—4. { Found in Gorakh-
pur District,
1 of Muḥammad Shāh do. Dated 1164—4. { United Provinces.
1 of Aurangzeb of Sūrāt mint. Dated 1102—34. Found in Fyzabad
District, United Provinces.
1 of Bahādūr, of Sūrāt mint. Found at Monza Bansa Kalan, District
Damoh, Central Provinces.

3 of Aurangzīb, of Sūrāt mint, detailed as below :—

Regnal Year.	Hijra.
1 of 22	1089
1 of 23	1090
1 of 24	1091
1 of 24	1092
1 of 26	1093
1 of 27	1095
1 of 28	1096
1 of 29	1097

2 found in the Gonda District of United Provinces detailed as below :—

- 1 of Allā-ud-dīn Muḥammad Shah, of Delhi mint, of 713 A. H., and
1 of do. do. 711 A. H.
1 of Allā-ud-dīn, of Delhi mint of 714 A. H. { Found in the
Bahraich District,
1 of Allā-ud-dīn Muḥammad Shah II of 711 A. H. { United Provinces.
2 punch marked coins found in the Akalkot State.
1 of Bahādūr of Sūrāt mint.
1 of Akbar.
2 of Shāh 'Ālam II.
2 of Do.

COPPER COINS.

- 1 of Muḥammad bin Tughlaq found in the Hardoi District.
1 of Mubārak I found in the Fatepur District, United Provinces.
1 of Allā-ud-dīn Muḥammad Shah II, dated 705, found in the Fatepur
District, United Provinces.
8 coins found in the Unao District, United Provinces, as detailed
below :—

1 of Fīroz with Fateh, dated 241.
1 of Fīroz III, dated A. H. 762.
1 of do. do. 769.
1 of do. do. 773.
1 of do. do. 775.
1 of do. do. 776.
1 of do. do. 780.
1 of do. do. 783.

- 2 of Chāhaḍadeva. { Found in the Etah District, United
1 of Maḥmūd bin Muḥdīn. { Provinces.
3 of Akbar.

16 found in the Fatehpur District, United Provinces, as detailed
below :—

- 1 of Malayavarmadeva.
4 of Muḥammad bin Sām.
5 of Altamsh.
3 of Kubach.
1 of Jalāl-ud-dīn.
2 of Tāj-ud-dīn Yalduz.

THINGS PURCHASED.

One brass image of a Devī with Ganeśa lying at her feet was purchased and presented by the Director General of Archaeology in India.

The Executive Engineer, Bijāpur District, informs me that the following were the additions to the Bijāpur Museum :—

- 1 Silver tray.
- 1 Copper box.
- 1 Silver coin.
- 2 Cosmetic boxes.
- 1 Hookah mount.
- 1 Copper bowl (turned).
- 1 Copper bowl.

The Curator of the Watson Museum of Antiquities of Rājkot, Kāthiāwār, Rājkot, favoured me with the following information :—

“The Curator has, during his usual district tour, taken the rubbings of 26 inscriptions in all. Sixteen of these are from the Jain temples of the Shetrunjaya hill near Palitānā. Nine of them, however, have been already published in the *Epigraphia Indica* (Volume II, Parts IX and X). The rest are unpublished and are dated V. S. 1615, 1789, 1789, 1650, 1430, 1675 and 1343, respectively.

“The remaining 10 are from Jasdan State and out of them the following are, important from a historical standpoint :—

Name of Village.	Locality.	Date.	Contents.
Vinchhiya	Deraser	1350	Idol of Parsuanath was donated.
Do.	Deraser	1450	Idol of Chaturvimsati Paṭṭa.
Jasdan	Kalupir	1292	Land granted.

11 Coins—

- AR 2 Kshatrapa coins illegible.
- AR 2 Skandagupta Kramāditya.
- AR 1 Kumāragupta Mahendrāditya.
- AR 1 Gupta (?).
- AE 2 Kārshāpaṇas.
- AE 3 coins of the Mahomedan period.
- AR 6 Jāmshāhi, Dewānshāhi and Rāṇāshāhi Koris and half Koris.
- AE Dokāḍas which were current at Jāmnagar, Māngrol, Paliād, Porbandar, Khirasarā, Nilvalā, Vadod, Khambhālā.

The Honorary Secretary, Barton Museum, Bhāvnagar, reports that no important acquisitions were made to the archæological sections of the Museum during the year 1914-15.

The Director, Baroda Museum, informs me that the following coins were added to the coin collection of the Museum :—

Name of King.	Mint.	Date (A. H.)
Rafiu-d-darjat	... Sūrat	... 1131
Farukh-Siyar	... Shāhjahānābād	... 1130
Do.	... Junāgaḍh	...
Do.	... Cambay	... 1125
Do.	... Sūrat	...
Shāh Jahān II	... Bombay (?)	...

Name of King.	Mint.	Date (A. H.)
Aurangzīb	... Aurangābād	... 1074
Do.	... Sūrat	.. 1098
Do.	... Do.	... 1105
Do.	... Do.	... 1106
Do.	... Do.	... 1109
Do.	... Do.	... 1110
Do.	... Do.	... 1113
Do.	... Do.	...
Do.	... Bareli	... 1116
Do.	... Cambay	... 1117
Do.	... Junāgadh	... 1117
Maḥamad Shāh	... Bombay (?)	... 1135
Do.	... Do. (?)	... 1136
Do.	... Shāhjāhānābād	...
Do.	... Cambay	...
Do.	... Sūrat	...
Shāh 'Alam I	... Cambay	...

The Superintendent of the Rājputānā Museum, Ajmer, favoured me with the following report upon the new acquisitions for his Museum during the year 1914-15:—

“ PREHISTORIC ANTIQUITIES.

No.

- (1) Sword 1 made of iron.
- (2) Knife 1 do.
- (3) Dagger 1 do.
- (4) Chisel 1 do.
- (5) Hatchet 1 do.
- (6) Stone Roller 1

“ IMAGES AND SCULPTURES.

- (1) Sculpture representing Shivā with 2 female attendants.
- (2) Jain image bearing inscription dated Sam. 12[xx].
- (3) Do. of Sam. 12[6]4.
- (4) Do. do. 1713.
- (5) Do. do. 1730.
- (6) Do. do. 1632.
- (7) Do. do. 1654.
- (8) Jain image of Adinath bearing inscription of Sam. 1573.
- (9) Do. of Sumatinath do. 1654.
- (10) Do. of Parsvanath do. 1665.
- (11) Jain image bearing inscription of Sam. 16[xx].
- (12) Do. do. 1650.
- (13) Do. do. 1573.
- (14) Part of a sculpture representing a small standing Digambar Jain image.
- (15) Part of an ornamental Jamb representing figures of Vishnu.
- (16) Image of Vishnu seated on Garuda (broken).
- (17) Lower part of a Digambar Jain image bearing inscription of Samvat 1640.
- (18) Lower part of a Digambar Jain image of Chandraprabhu bearing inscription of Samvat 1625.
- (19) Jain image of Sumatinath bearing inscription of Sam. 1648.
- (20) Do. of Sreyamonath do. 1648.

- (21) Standing Jain image of Digambar bearing inscription of Sam. 1130.
 (22) Do. do. do. 1137.
 (23) Do. do. without any inscription.
 (24) Image of Vaman, incarnation of Vishnu.
 (25) Standing image of Vishnu with 3 faces and 20 arms.

“ PORTRAITS.

From Jaipur—

Maharaja Bhagwandasji.
 Raja Mansinghji.
 Mirza Raja Jaisinghji.
 Maharaja Pratapsinghji.
 „ Ram Singhji.

From Bharatpur—

Maharaja Churamanji.
 „ Surajmalji.
 „ Ranjit Singhji.

From Karauli State—

Maharaja Harbakoh Palji.
 „ Manik Palji.
 „ Gopal Singhji.

“ INSCRIPTIONS COPIED (IMPORTANT ONES).

(1) An inscription of the Parmar Prince Chamundaraj, dated Sam. 1136 (A. D. 1085) and is engraved on a well preserved large slab built into the wall of the Mandlesar temple at Arthuna in the Banswara State. (*Vide* Indian Antiquary, Volume XXII, page 80.)

(2) An inscription of the time of the Parmara Prince Chamundaraja. It mentions the name of an officer but unfortunately the portion of the slab containing the name is destroyed. He (the officer) had three sons Asadeva, Bhavyasaraja and Anantpal. Anantpal founded a temple of Shiva. It is dated Sam. 1137 (A. D. 1080) and was found in a ruined temple of Shiva at Arthuna.

(3) An inscription of the time of the Parmara Prince Chamundaraja. It is dated Samvat 1157 (A. D. 1102) and was found in a Jain temple at Arthuna. It is much defaced.

(4) An inscription of the Chālukya King Siddharaja Jayasimha of Gujarāt. It is engraved on the pedestal of the image of Ganesa and is defaced. Found at Talwara (in the Banswara State).

(5) An inscription of the time of (the Chālukya) King Bhimadeva II of Gujarāt, dated Samvat 1253 (A. D. 1196) and is engraved on the pedestal of the image. Found at Barti Dimada in the Dungarpur State. The inscriptions Nos. (4) and (5) show that the country known as Vagad (which contain the Dungarpur and Banswara States) was under the rule of the Chālukya Kings of Gujarāt in the 12th century A. D.

(6) An inscription of Maharaja Samantsimhadeva (of Mewar and Dungarpur). It records that he made a gift of Suvarna-Kalasa (golden pinnacle) to the temple of Ambadevi at Jagat. It is dated Samvat 1228 (A. D. 1171) and is engraved on a pillar of the temple at Jagat in Mewar.

(7) An inscription of the time of the Prince Sumanta-Simha (mentioned above). It is dated Samvat 1236 (A. D. 1179) and was found in the temple of Breshwar, about 3 miles from Nathanva on the bank of the river Mahe in the Dungarpur State.

(8) An inscription of the time of Ra (Rawal) Sihadadeva (of Vagod). It is engraved on a pillar of the temple of Ambadevi at Jagat. It is dated Samvat 1277 (A. D. 1220).

(9) An inscription of the time of Maharajadhiraj Sihadadeva (mentioned above). It records that the temple of the goddess (Vindhyavasini) situated at Vinijhalpur, was rebuilt by Vaija, the son of Mahilana, when Sihadadeva was ruling at Vatapadraka (*i. e.*, Baroda) in Vagod. It is dated Samvat 1291 (A. D. 1234) and is engraved on a slab built into the wall of the temple of the goddess Vejva, about a mile from Bhekrod in the Dungarpur State.

(10) An inscription of the Samvat 1306 (A. D. 1249) engraved on a pillar of the temple of the goddess Ambikadevi at Jagat. It records the erection of Suvaradamda (golden flagstaff) on the temple by Jayasyamghadeva son of Sihadadeva and grandson of Jayatasiha. Jayatasiha of this inscription is the famous King Jaitrasimha of Mewar.

(11) A copper plate grant of Maharajakula (Maharawal) Virasimhadeva of Vagod. It is dated Samvat 1243 (A. D. 1186) and records the grant of a land and a house to Brahmin Tala, the son of Vaija for the spiritual welfare of Maharajakula Devapaladeva. It was found at Mar about 3 miles from Baroda in the Dungarpur State.

(12) An inscription of the time of Maharajakula Virasimhadeva. It records the construction of a stone cistern on which it is engraved. It is dated Samvat 1349 (A. D. 1292) and was found in a ruined temple of Shiva at Baroda in the Dungarpur State.

(13-14) Two inscriptions of Maharajakula Virasimhadeva. They record grants of lands, and are engraved on stone pillars fixed in fields, at Vanvasa about 3 miles from Bhekrod in the Dungarpur State. Both are dated Samvat 1359 (A. D. 1302).

The inscriptions copied during the last tour are of great importance for the history of Rājputānā and most of them help us in fixing the dates of the early rulers of Udepur, Dungarpur and Banswara States, whose correct dates are still unknown.

“The following is the list of coins added to the coin cabinet of the same Museum :—

Received from the Superintendent, Government Museum, Madras :—

1 gold of South Indian Fanam of Moghal or Nawab of Cuddappa.	} Cuddappa Mint.
1 silver of Roman Denarius of Augustus.	
1 Do. do. Tiberius.	
1 Do. French Colonial Mahe ($\frac{1}{5}$ Rupee) dated 175[x].	
4 lead Andhra coins (without any inscription on them).	
1 gold half Pagoda of Venkata of Vijayanagar.	

Received from the Director of Agriculture and Industries, Central Provinces, Nāgpur :—

1 gold of Sultan Mohammad Tughlaq of Delhi.	} Delhi Mint.
1 Do. Firoz III.	
1 Do. do. (square.)	
3 copper of Akbar.	
1 silver of do. II.	
1 Do. of Aurangzeb, regnal year 25 (Hijri 1093).	
1 Do. do. do. 27 („ 1095).	
1 Do. do. do. 28 („ 1096).	

Received from the Under Secretary to Government, United Provinces, Allāhābād :—

1	silver of Shāh 'Ālam II, dated 1225-26	...	Lucknow	Mint.
1	Do. do. do.	...	Benares	"
1	Do. do. I	...	Lucknow (?)	"
1	silver of Alamgir II	...	Gorakhpur	Mint.
1	Do. Alauddin Mohommed Shah II	...	Delhi	"
3	copper do.	...	"	"
1	Do. Muhammad-Bin-Tughlaq.			
1	Do. Firoz.			
1	Do. do. III, dated Hijra 777.			
1	Do. Chahadadeva (?).			
1	Do. Qutb-uddin.			
1	Do. Muhammad-Bin-Sam.			
2	Do. do.			
1	Do. Jelaluddin (?).			
1	Do. Kubach (?).			
3	Do. Altamash.			
1	Do. Jelaluddin Elduz.			
1	Do. Mohommed-Bin-Sam.			
1	Do. Malayavarmadeva.			

Received from the Honorary Secretary to the Bombay Branch of the Royal Asiatic Society, Bombay :—

2 silver Punch-marked Hindu coins.

2 „ coins of a Native State bearing the name of Shāh 'Ālam II.

Received from the Resident, Western Rājputānā States, Jodhpur :—

4 silver Undeciphered. Have Persian inscriptions."

APPENDIX H.

Treasure Trove.

Regarding the old coins acquired by the Government of Bombay under the Treasure Trove Act, VI of 1878, and forwarded for examination and distribution to the Bombay Branch of the Royal Asiatic Society, the Honorary Secretary of that Institution has favoured me with a printed copy of the Society's Annual Report for 1914, from which the following information is taken : "There were 343 coins, 1 gold nose-ring and one silver ring under examination at the close of 1913 and 1,043 were received during 1914. The latter included 5 gold and 1 silver from the Māmlatdār of Shirpur; 200 silver from the Māmlatdār of Bassein; 590 from the Māmlatdār of Akola; 203 from the Māmlatdār of Sangamner; 42 gold from the Māmlatdār of Khed; 1 gold and 1 silver from the Collector of West Khāndesh. Of these 586, the gold nose-ring and the silver ring were examined, reported to Government and disposed of; one silver from the Collector of West Khāndesh was returned as it possesses no numismatic value. The Akalkot Durbār was good enough to allow the Society to distribute to the several institutions 32 of the coins sent by it for examination. The coins were examined for the Society by Mr. Framji J. Thānāwālā and Professor S. R. Bhāndārkar. Five from the Collector of Kaiṛā, 590 from the Māmlatdār of Akola, 203 from the Māmlatdār of Sangamner and 1 from the Collector of West Khāndesh have yet to be disposed of.

"The selected coins have been distributed and the balance after distribution has been forwarded to the Mint Master for sale and disposal. Eighty-one were returned to the Akalkot Durbār :—

Institutions.	Gold.	Silver.	Total.
The Prince of Wales' Museum of Western India ...	11 and gold nose-ring.	33	44
The Indian Museum, Calcutta ...	7	15	22
Madras Museum ...	2	13	15
The Provincial Museum, Lucknow ...	...	9	9
The Lahore Museum ...	2	10	12
The Nagpur Museum ...	2	10	12
The Public Library, Shillong ...	2	10	12
The Archæological Museum, Poona ...	1	9	10
The Peshawar Museum ...	...	7	7
The Quetta Museum ...	...	7	7
The Ajmer Museum ...	...	7	7
The Rangoon Museum ...	...	7	7
Dacca Museum ...	...	2	2
Asiatic Society, Bengal ...	...	7	7
Bombay Branch Royal Asiatic Society ...	...	7	7
The British Museum ...	...	7	7
Fitz-William Museum, Cambridge ...	...	6	6
For sale at Mint ...	26	286 and silver ring.	312
Returned to Akalkot Durbār ...	...	81	81
	53	533	586

"The Librarian has commenced preparing a complete list of the coins in the coin cabinet of the Society with details of each with a view to making a catalogue after the work in connection with the catalogue of books is over."

On the 30th June 1914, the treasure consisting of the articles described below was found under vacant Gaothan land of West Khandesh Distric. Taloda town, taluka Taloda, while digging a pit for making a shed for the God Māruti :—

Golden coins, 15, weighing Rs. 4-14-0.

Golden ornament 14 (dol.), weighing Re. 1.

Do. (Karnaful) 2, weighing *Masas* 4.

Do. (Chhatra) 1, weighing *Masas* 3.

Silver coins 120, weighing Rs. 44.

While excavating near a house formerly belonging to Mr. Ibrahim Khan Mohamed Fitavala and now acquired by the City Improvement Trust in case No. 2 of their East Agripáda Scheme No. 32, 21 pieces of silver ornaments specified below and 3 pieces of silver weighing in all about 21 tolás were found by certain coolies named Laha Chakori, Geni Dhanu, Gangadin Bhika, Frai Gayadin and Datadin Dabaj :—

6 Talismen.

2 Tops of tassels.

8 Earrings of two kinds.

2 Old coins used as pendants.

1 Armlet.

2 Pieces of an arm plate.

Mr. J. Ghosal, Collector of Kaira, informed me in his letter No. R.-1105 of the 15th February 1915, that "silver coins (631 whole rupees and 28 half rupee pieces, total Rs. 645) have been discovered at Dharoda, a village in the Mátar Táluka of his district. They are not of British mintage. I have sent recently some coins out of them as samples to the Secretary to the Bombay Branch Royal Asiatic Society, Bombay, to ascertain whether they are worth acquiring."

The Resident, Mewar, with his No. 419 of 23rd February 1915, forwarded to this office a copy of an abstract translation of Vernacular Khat No. 202, dated the 28th January 1915, from the Mahkmá Khās, Mewār, to his address, in which he states as follows:—"With reference to your Vernacular Khat No. 2719, dated the 17th July 1908, and subsequent reminders requesting for a report regarding treasure trove coins, we beg to state that no treasure trove was found during the years 1907 and 1908. In 1909, forty-one pieces were found at Tegle Gháti near Parsoli, a Jágir village, but the coins are not of such antiquities as to warrant their transmission to the numismatic expert for examination. Ten rupees and forty-five pieces were found at a place between the temple of Nil Kanth Mahadeoji and Miran Bai in the Chitorgarh Fort. The number of rupees found being small and the piece in question being not of a very old date. The coins were not sent to you. No treasure trove was found during the years 1910 to 1913.

"In 1914, 386 big copper pieces, 10 small round and 7 small square copper pieces were discovered in the court yard of the Chitorgarh Fort. These coins are believed to be of old dates. Of these, 14 big, 2 small round and 2 small square pieces will be sent to you later on.

"Five hundred and fifty-seven old coins have been found within the limits of Jágir village Hatana in the Hurra District. Of these, 14 coins are sent herewith."

Of all the coins referred to above, 32 coins were forwarded to me for examination and report:—

14 Coins of Firoz Shah Tughlaq, of varfou dates (all these coins appear to be made of billon).

1 coin dated 766 (A.H.) issued from Delhi.

1 coin dated 770 (A.H.) Do.

1 coin dated 773 (A.H.) Do.

1 coin dated 775 (A.H.) Do.

1 coin dated 776 (A.H.) Do.

1 coin dated 777 (A.H.) Do.

2 coins without date, issued by Firoz Shah, with Fateh Khān.

6 coins with illegible or no dates.

—
14
—

4 coins of Quṭb-ud-dīn Mubārak Shāh (son of Alla-ud-din Khilji).

2 silver coins, square in form, dated (7) 19 A.H.

2 billon coins.

—
4
—

14 silver coins, irregularly circular in form, called 'ādivarāha' coins.

Obv.: Two-line inscription, partly seen on different specimens, in Nāgarī characters.

‘ (Shri) Madādi.

Varā (hah)’.

Rev. : Rude representations of the boar inscription of Vishnu.

(These coins seem to be some of those common imitations of the original type, issued by king Bhojadeva I of Mahodaya.)

The Political Agent, Kotah and Jháláwár, with his letter No. 553-T—65 of the 9th April last, sent me for examination an old coin received by him from the Nazim of Manohar Thána in the Kotah State which has no date but with the following :—

Obv. : Rama and Sita seated on a throne, on left one of Rama’s brothers holds umbrella over him. The other two are on the right. Below is Hanuman with his hands folded. Shown as prostrate.

Rev. : Two standing figures, with bows and arrows presumably Rama and Lakshman with the following legend in modern Nagari, around the figures in a circle “ Rama Lachhaman Janaka ja vala ha na mana ” incorrect for “ Rāma Lachhamana Jānakī Jaya bolo Hanumānakī.”

In his letter No. 1813, dated the 18th March last, the Political Agent, Mahi Kántha, gave me the following information regarding the treasure trove found in which he states “ that old silver coins numbering 194 were found from the bed of the river Khari in the vicinity of the village of Dabhoda, 14 miles north-east of Ahmedabad under this Agency in the year 1894 A.D., and that they have been kept in the Agency Húzur Treasury at Sádra. On a reference to the Secretary, Bombay Branch of the Royal Asiatic Society, the coins seem to have been struck at various mints such as Surat, Ahmedābād, Akbarābād, Shāhjahānābād, etc., and they are of the following description :—

Mahomedshah	..	...	...	...	137
Alamgir Aurangzib	...	...	..	...	18
Faruksir ...	...	..	...	...	16
Names not legible	...	...	...	...	8
Shah Jahan II	...	...	...	...	4
Shah Alam		...	...	...	2
Jahandar ...	...	...	...	...	2
Bearing names of a regent		...	...	...	2
Firukseer (Half rupee)		2
Mahomed Shah (Half rupee)	2
Alamgir Aurangzib (Half rupee)	1

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“ The Secretary has further stated that the coins are of historical interest and worth preserving. The approximate quantity of silver in a whole rupee is 168 grains and in half rupee, half the amount. I would therefore request that you will be so good as to let me know whether you would like to have them for any collection. If so, please state the price in the current British coin that you will pay for the old coins. Rs. 178-9-6 were spent as regards to the finders. On hearing from you the coins will be sent to you for inspection, if necessary.”

At present I am in correspondence with the Political Agent about the disposal of these coins.

APPENDIX K.

Protected Monuments.

1. The undermentioned Monuments in the Central Division have been declared protected by Government Resolution No. 9291, General Department, dated the 17th November 1914:—

EAST KHANDESH DISTRICT.

1	Erandol	...	Erandol	...	Pāndaws' Vāda	...	II (b).
2	Pāchora	...	Sangameshvar	...	Mahadeva temple	...	II (b).
3	Chāiisgāon	...	Vaghli	...	Mudhai Devi temple	...	III.
4	Do.	...	Do.	...	Three inscription slabs in the temple of Krishna.	...	I (b).
5	Do.	...	Pātna	...	Mahesvara temple	...	I (a).
6	Do.	...	Do.	...	Temple of Chandika Devi	...	III.

WEST KHANDESH DISTRICT.

1	Sākri	...	Bhāmer	...	The old gateways in the ruined fort and caves.	...	III.
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NASIK DISTRICT.

1	Igatpuri	...	Tringalvadi	...	Jaina Cave	...	III.
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AHMEDNAGAR DISTRICT.

1	Shrionda	...	Pedgāon	...	Bāleshwar temple	...	III.
2	Rāhuri	...	Bāmini	...	Hemādpanti tank	...	III.

POONA DISTRICT.

1	Junnar	...	Junnar	...	Small Dargah near Habshi Gumbaz.	...	II (b).
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2. The undermentioned monument in the Sātāra District was declared protected by Government Resolution No. 4320, General Department, dated the 1st June 1914:—

1	Sātāra	...	Karanja	...	The brick column erected by Emperor Aurangzib.	...	II (a).
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3. The undermentioned ancient monuments in the Panch Mahāls District were declared protected by Government Notification No. 5325A, dated the 7th July 1914, General Department:—

1	Hālol	...	Chāmpānir	...	The Lili-Gumbaz-ki Masjid	...	} II (a).
2	Do.	...	Do.	...	Some old ruined Jain temples in the old town of Chāmpānir.	...	
3	Do.	...	Hālol	...	The Ek-Minar-Ki-Masjid	...	} II (a).
4	Do.	...	Do.	...	The Panch-Mahud-Ki-Masjid	...	

4. The undermentioned ancient monument in the Panch Mahāls District is declared protected by Government Resolution No. 9512, General Department, dated 25th November 1914:—

1	Hālol	...	Chāmpānir	...	Citadel walls	...	II (a)
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5. The undermentioned monuments were declared protected as per Government Resolution No. 9099 of the 11th November 1914, General Department:—

Serial No.	Place where the monument is situated.		Name or description of the monument.	Class of monument or other remarks.
	Táluka.	Town or village.		
1	Bijāpur	Bijāpur	The Jumā masjid	I (a)
2	Do.	Do.	Alli Shāhid Pīr's masjid	"
3	Do.	Do.	The Andu masjid	"
4	Do.	Do.	The Zanjiri or Malik Jahān Bagam's Mosque.	"
5	Do.	Do.	The Zāmrud masjid	"
6	Do.	Do.	The Makkā masjid	"
7	Do.	Do.	The Gagan mahāll	"
8	Do.	Do.	The Sāt Mazli	"
9	Do.	Do.	The Mihtari mahāll	"
10	Do.	Do.	Ali I Rauzz	"
11	Do.	Do.	The Gol Gumbaz	"
12	Do.	Do.	The Jod Gumbaz	"
13	Do.	Do.	The Kamarkhi Gumbaz	"
14	Do.	Do.	The Chand Bāvri	"
15	Do.	Do.	The Tāj Bāvri	"
16	Do.	Do.	The Ibrāhim Rauza	"
17	Do.	Do.	The gates and walls of the city and citadel.	"
18	Do.	Do.	The water pavilions	"
19	Bādāmi	Bādāmi	The Jain and Vaishnavā caves	"
20	Bijāpur	Bijāpur	Batulā Khān's masjid	II (a)
21	Do.	Do.	Yusuf's old Jāmi masjid	"
22	Do.	Do.	Mustafā Khān's mosque	"
23	Do.	Do.	Karim-uddin's mosque	"
24	Do.	Do.	Old mosque No. 294	"
25	Do.	Do.	Chinch Didi masjid	"
26	Do.	Do.	Ibrāhim I Jāmi masjid	"
27	Do.	Do.	Ikhalās Khān's mosque	"
28	Do.	Do.	Chhoti Asār mosque	"
29	Do.	Do.	The Rani masjid	"
30	Do.	Do.	The Mubārak Khān's māhal	"
31	Do.	Do.	The Green-stone tomb	"
32	Do.	Do.	Ali II Rauza	"
33	Do.	Do.	Malik Sandal's tomb	"
34	Do.	Do.	Shikandar Shah's tomb	"
35	Do.	Do.	Kishwarkhan's tomb	"
36	Do.	Do.	Hāji Hassansāheb's tomb	"
37	Do.	Do.	Water towers Nos. 61, 67, 91, 114, 115, 142, 147, 286 and 289.	"
38	Do.	Do.	The Badi Kamān	"
39	Indi	Indi	Inscriptions	I (a)
40	Do.	Sālotgi	Do.	"
41	Do.	Tāmbe	Do.	"
42	Sindgi	Almel	Do.	"
43	Do.	Hippargi	Do.	"
44	Hungund	Aiholli	The Jain temple of Meguti	II (a)
45	Do.	Do.	The temple of Lādkhān	"
46	Do.	Do.	The great Durgā temple	"
47	Do.	Do.	Kontgudi	"
48	Do.	Do.	The temple adjoining Kontgudi on west side and inscription tablet within the temple.	"
49	Do.	Do.	The temple adjoining Kontgudi on south-west side, known as Suranggudi.	"
50	Do.	Do.	The temple with front whitewashed with a large Nandi in the hall (about 100 yards west of the south-west gateway of the town).	"
51	Do.	Do.	Matha or hall just behind the last without a shrine.	"

Serial No.	Place where the monument is situated.		Name or description of the monument.	Class of monument or other remarks.
	Táluka.	Town or village		
52	Hungund	... Āiholli	... The temple in Survey No. 270 owned by Huchhappaya.	II (a)
53	Do.	... Do.	... The two-storied Jain temple and cave on hill under Meguti.	"
54	Do.	... Do.	... The Huchhimalligudi in Survey No. 64.	"
55	Do.	... Do.	... Temples in fields, a short distance from the north-west corner of village.	"
56	Do.	... Do.	... Temple close beside last (the last two are in fields 1 or 285 or both).	"
57	Do.	... Do.	... Temple and adjoining smaller buildings in Survey No. 66, known as Jotirling.	"
58	Do.	... Do.	... Temple in village close to that of Lādkhān to its north-east corner.	"
59	Do.	... Do.	... Temple on the north of the last ...	"
60	Do.	... Do.	... Small temple to south-west of the great Durga temple.	"
61	Do.	... Do.	... Ambigergudi	"
62	Do.	... Do.	... Do.	"
63	Do.	... Do.	... No name (this temple is situated in Māhār-wādā).	"
64	Do.	... Do.	... Badigergudi	"
65	Do.	... Do.	... Gāvdar Ishwargudi	"
66	Do.	... Do.	... Rāchigudi	"
67	Do.	... Do.	... Yanniavargudi	"
68	Do.	... Do.	... No name, but forms part of No. 67 above.	"
69	Do.	... Do.	... Ishwarling	"
70	Do.	... Do.	... Do.	"
71	Do.	... Do.	... Do.	"
72	Do.	... Do.	... Veniavargudi	"
73	Do.	... Do.	... Do.	"
74	Do.	... Do.	... Do.	"
75	Do.	... Do.	... Charanti Math (or Murphadryavar Gudi).	"
76	Do.	... Do.	... Do. do.	"
77	Do.	... Do.	... Tryambakeshwar temple (black marble) Ishwarling.	"
78	Do.	... Do.	... Maddingudi (Basavannā)	"
79	Do.	... Do.	... Do.	"
80	Do.	... Do.	... Yogi Nārāyan temple	"
81	Do.	... Do.	... Bhoyargudi	"
82	Do.	... Do.	... Jotirling temple	"
83	Do.	... Do.	... Ishwarling (No local name)	"
84	Do.	... Do.	... Basavannā do.	"
85	Do.	... Do.	... Ishwar do.	"
86	Do.	... Do.	... Karegudi	"
87	Do.	... Do.	... Bilegudi	"
88	Do.	... Do.	... Gardigudi	"
89	Do.	... Do.	... Gāvdargudi	"
90	Do.	... Do.	... Do.	"
91	Do.	... Do.	... Desayargudi	"
92	Do.	... Do.	... A temple of Galganāth group	"
93	Do.	... Do.	... Do. do.	"
94	Do.	... Do.	... Do. do.	"
95	Do.	... Do.	... Galganāth temple	"
96	Do.	... Do.	... A temple of Galganāth group	"
97	Do.	... Do.	... Do. do.	"
98	Do.	... Do.	... No name (close to No. 99)	"
99	Do.	... Do.	... Vīrbhadra-devar temple	"

Serial No.	Place where the monument is situated.		Name or description of the monument.	Class of monument or other remarks.
	Táluka.	Town or village.		
100, 101, 102 & 103	Hungund	... Āiholli	... No name. (All these temples are in group and in one line on the right bank of the river Malaprabhā in Survey No. 267.)	II (a).
104	Do.	... Do.	... Rāmling temple	"
105	Do.	... Do.	... Sangameshwara temple	"
106	Do.	... Do.	... One temple of Rāmling group	"
107	Do.	... Do.	... Do. do.	"
108	Do.	... Do.	... Mudi Rāmapā temple	"
109	Do.	... Do.	... Rāvan Phadi (Brahmanical cave)	"
110	Do.	... Do.	... Mena Basti (Jain cave)	"
111	Do.	... Do.	... Dolmens	"
112	Do.	Nandwadgi	... Inscriptions	"
113	Do.	Bhairānmatti	... Do.	"
114	Bādāmi	Nandikeshwar	... Do.	"
115	Do.	Belur	... Do.	I (b).
116	Do.	Katgeri	... Do.	"
117	Bijāpur	Bijāpur	... Bukhāri masjid	II (a).
118	Do.	Do.	... Dhārwādi masjid	"
119	Do.	Do.	... Ibrāhimpur masjid	"
120	Do.	Do.	... Jahān Bega n's tomb	"
121	Do.	Do.	... Mosque No. 21 behind the Chandā Bāvir.	"
122	Do.	Do.	... The Mullā Mosque	"
123	Do.	Do.	... The Dam of the Ramling Tank outlet.	"
124	Do.	Do.	... All old guns on Ramparts and in trophy.	"
125	Do.	Do.	... Dakhani Idgāh	"
126	Do.	Do.	... Parkhān's masjid	"
127	Do.	Do.	... The grave of Aurangzeb's wife in the Navbag.	"
128	Do.	Do.	... Mosque No. 314	"
129	Do.	Do.	... Do. 329	"
130	Do.	Do.	... Moti Dargā	"
131	Do.	Do.	... Shaha Navāzkhān's tomb	"
132	Do.	Do.	... The Mosque at the Gol Gumbaz	"
133	Do.	Do.	... Mosque No. 213	"
134	Do.	Do.	... Yākub Dābuli's Mosque and tomb No. 204.	"
135	Do.	Do.	... The Jalamandir	"
136	Do.	Do.	... Mahāl at Aināpur in field	"
137	Do.	Do.	... A ruined gate-way with inscription slab No. 127.	"
138	Do.	Do.	... The Ambar Khānā	II (b).

6. The undermentioned monuments in the Dhārwār District were declared protected by Government Resolution No. 4815, General Department, of 16th June 1915:—

Serial No.	Táluka.	Town.	Name or description.	Class.
1	Hubli	... Adargunchi	... Large Jaina Image	III.
2	Do.	... Do.	... Inscriptions	I (b).
3	Gadag	... Betgeri	... Viragal on land of the Hatagara Mallaraya; also inscribed memorial stones in a walled enclosure. (The collection of stones, fifteen in number, and enclosed by a mud wall locally known as Mallarayankatti.)	I (b).

7. The sub-classification of the undermentioned monuments in the Kaira District declared protected by Government Resolution No. 2704 of 26th May 1909 was upon the further representation by the Collector of that District altered by Government Resolution No. 1687 of 25th February 1915 as follows :—

Serial No.	Taluka.	Town.	Name or description.	Class.
1	Mehemedābād	Sejali	Tomb of Mubārak Sayyid	II (b).
2	Do.	Mehemedābād	Bhāmāria well	II (a).
3	Kapadvanj	Kapadvanj	A sculptured arch	II (b).
4	Thāna	Sarnal	Temple of Gaitesvara	II (a).

8. In the case of the three undermentioned monuments in the Ahmednagar District, declared protected by Government Resolution No. 2704 of 26th May 1909, the sub-classification has been changed as follows by Government Resolution No. 7949, General Department, of 6th October 1914 :—

Serial No.	Taluka.	Town.	Name or description.	Class.
3	Ahmednagar	Ahmednagar	The tomb of Nizām Ahmed Shah	II (b).
8	Shrigondā	Pedgāon	Temple of Lakshmi Nārāyan	I (b).
9	Do.	Mandavgān	Temple of Devi	II (b).

AGREEMENTS.

9. The Collector of Thāna in his letter No. 6696 of the 22nd October 1913 to the address of the Commissioner, Northern Division, has stated that the owner Mr. F. A. C. Rebellow was willing to execute an agreement regarding the Kondivte caves, and requested that the necessary sanction of Government might be obtained. The agreement was sanctioned by Government Resolution No. 4287, General Department, of 30th May 1914.

10. In the case of the marginally noted monuments in the Kaira District the Collector in his letter No. R.-2454, dated the 9th April 1914, to the address of the Commissioner, Northern Division, reported that agreements had been taken from their owners. The action taken by the Collector was sanctioned by Government as per Government Resolution No. 6335, General Department, of 11th August 1914, General Department.

11. In his letter No. 7991 of the 28th July 1914, the Collector of Belgaum reports having executed agreements in the case of the monuments listed below and his action has been approved by Government as per Government Resolution No. 8090 of the 9th October 1914, General Department :—

1. The Kánarese or Telugu inscription of about the 15th century in the old temple of Ishwar at Degalvalli.

2. Old Kánarese inscription in the temple of Banashamkari at Asundi.

3. Kánarese Ratta inscription and a fragment of another in the temple of Ankushesvara at Saundatti.

4. Ratta inscription in a Jaina temple in the village of Konnur.

5. Kánarese or Telugu Ratta inscription of about the 15th century in the old temple of Mahalingesvara at Konnur.

6. Kánarese or Telugu inscription in the temple of Mallikarjuna at Murgod.

7. Two Jain temples at Belgaum.

8. Safa Masjid at Belgaum.

12. The Collector of Thāna has executed an agreement with the owner of these caves at Majas, Salsette taluka of his District, and its execution has been sanctioned by Government as per Government Resolution No. 8098, General Department, of the 9th October 1914.

APPENDIX L.

Statement of expenditure on Conservation Works carried out in the
Bombay Presidency during the year 1914-1915.

NORTHERN DIVISION.

District.	Tālukā.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1914-15.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Presidency	Panwel	Ghārāpuri	Elephant Caves	2,048 0 0	2,018 0 0	Maintenance of and repairs to caves.	Completed.
Do.	Do.	Do.	Do.	86 0 0	85 0 0	Current repairs to custodian's quarters.	Do.
Do.	Do.	Do.	Do.	11 0 0	11 0 0	Current repairs to Assistant Custodian's quarters.	Do.
Do.	Do.	Do.	Do.	11 0 0	11 0 0	Current repairs to Police Chauki.	Do.
Thānā	Bassein	Bassein	Old Portuguese Fort and ruins.	7,494 0 0	862 7 3	Removal of vegetation, etc., and repairs to masonry of <i>chulas</i> .	Do.
Do.	Do.	Do.	Do.	100 0 0	100 0 0	Cement repairs, etc. Purchase of material for plasterwork.	Do.
Do.	Kalyān	Ambarnath	Temple of Ambarnath.	2,020 0 0	893 11 1	Supporting structure with iron work, repairing compound wall and clearing compound.	Do.
Do.	Andheri	Kanheri	Caves	244 0 0	97 14 6	Scraping and painting with Sacre leme's stone liquid.	Do.
Kolaba	Alihag	Revdanda	Agarkot	2,475 0 0	358 0 0	Payment of compensation for land acquired.	Do.
Do.	Do.	Do.	Portuguese Cathedral.	21 0 0	21 0 0	Resetting keystone	Do.
Do.	Do.	Do.	Portuguese remains in Fort.	2,684 0 0	118 0 0	Making tops of walls of Jesuit monastery and dominican church watertight, and supplying pipe railing to castle or factory.	Do.
Do.	Do.	Kailai	Fort	1,460 0 0	30 0 0	Survey expenses for preparation of site plans of monuments	Do.
Do.	Mahād	Raigad	Shivaji's tomb	70 0 0	70 0 0	Ordinary repairs	Do.
Broach	Broach	Broach	Jami Masjid		175 0 0	Current repairs	Do.
Do.	Do.	Do.	Dutch tombs	35 0 0	35 0 0	Repair and maintenance.	Do.
Surat	Olpad	Hajira	Vaux's tomb	25 0 0	25 0 0	Current repairs	Do.
Do.	Surat	Surat	English Cemetery.		494 0 0	Special repairs	Do.
Do.	Do.	Do.	Dutch and Armenian tombs.		55 0 0	Do.	Do.
Ahmedabad	Daskroi	Ahmedabad	Archæological monuments.	535 0 0	331 0 0	Pay of caretakers for...	Do.
Do.	Do.	Do.					As the estimate was sanctioned late, additional watchmen required were not employed.
Do.	Sanad	Sarkhej					
Do.	Dholka	Dholka	Archæological buildings.	985 0 0	975 0 0	Removal of shrubs and rank vegetations, and petty repairs such as fillings cracks, etc.	Completed.
Do.	Viramgām	Viramgām					

Omitted in the Accountant General's list.
Omitted in the Superintending Engineer's list.

NORTHERN DIVISION—continued.

District.	Tālukā.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1914-15.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Ahmedabad...	Daskroi	... Rajpur pur.	Hir- Bibi's mosque	63 0 0	44 0 0	Sorting out stones fallen from the minars.	In progress.
Do. ..	Do.	... Do.	Do. ...	314 0 0	289 0 0	Repairs to compound wall.	Do.
Do. ...	Sánand	... Sarkhe	Small <i>masjid</i> on the east side of tank.	147 0 0	147 0 0	Repairing <i>chajja</i> at east cornice.	Completed.
Panch Mahāls	Halol	... Champanir.	Certain old buildings.	472 0 0	322 0 0	Preparing survey of old town.	Do.
Do. ...	Do.	... Do.	Protected monuments.	650 0 0	580 0 0	Providing notice boards.	In progress.
Do. .	Do.	... Do.	Jami Masjid	166 0 0	166 0 0	Current repairs	Completed.
Do. .	Do.	... Do.	Kevda Masjid	83 0 0	43 0 0	Do.	Do.
Do. ..	Do.	... Do.	Nagina Masjid	83 0 0	43 0 0	Do.	Do.
Do. ...	Do.	... Do.	Archæological buildings.	200 0 0	200 0 0	Clearing and widening footpaths to buildings.	Do.
Kaira	Mehmadabad	Sojali	Mubarak Sayyad's tomb.	1,340 0 0	109 0 0	Special repairs	In progress.

CENTRAL DIVISION.

Poona	Māval	... Karli	... Caves	550 0 0	543 11 0	Caretaker's pay and ordinary repairs.	Completed.
Do.	Do	... Do.	Do	116 0 0	115 0 0	Special repairs — Mounting rolled steel joist in one opening between the column and the wall under the front ruined screen; and another under a crack in arch filling to central entrance way; and also painting the iron work.	Do.
Do	Do.	... Do	Do	159 0 0	101 0 0	Removing the existing railing and substituting it by one of 3" piping supported by T iron posts.	In progress.
Do.	Do.	... Bhaja	Do	100 0 0	84 12 0	Ordinary repairs	Completed.
Do.	Do.	... Bedsa	Do	100 0 0	114 7 0	Do.	Do.
Do.	Junnar	... Junnar	Do.	400 0 0	399 14 0	Do	Do.
Do.	Shirur	... Koregaon	Old monuments	.....	58 5 9	Do	Do
Sholápur	Sholápur	... Sholápur	Fort	200 0 0	200 0 0	Do.	Do.
Ahmednagar.	Kopargaon...	Kokamthan.	Old temple of Damodar Mahadev.	.....	60 0 0	Do.	Do.
Násik	Násik	... Páthardi	Pandu Lena Caves.	141 0 0	141 0 0	Caretaker's pay	Do
West Khándesh.	Pimpalner	... Balsana	Old temple	12 0 0	12 0 0	Do	Do.
East Khándesh.	Chálisgaon...	Patan	Temple of Mahesvara	1,338 0 0	260 0 0	Special repairs were taken up in March 1914 and up to date a sum of Rs. 533 has been spent in applying stone preserving solution to carvings and purchasing wood work for pipe railing. One rolled steel beam has been put below a broken beam.	The work was suspended for want of funds, <i>vide</i> Superintendent, Archæological Survey, Western Circle's No. 778 of 9th September 1914. The works needed are putting rolled steel beams for supporting broken beam in one bay and a W. I. pipe railing.

Omitted from the Accountant General's list.

SOUTHERN DIVISION.

District.	Talukā.	Place	Name of monument.	Amount of estimate	Actual expenditure during the year 1914-15.		Description of repairs done	Remarks
				Rs. a. p.	Rs.	a. p.		
Bijapur	Bádāmi	Bádāmi	Caves	78 0 0	78	0 0	Pay of caretaker	Completed
Do.	Bijapur	Bijapur	Bijapur Museum	150 0 0	150	0 0	Ordinary repairs to the Museum building.	Do
Do.	Do.	Do	Museum caretaker's quarters.	10 0 0	10	0 0	Do	Do.
Do.	Do.	Do.	Archæological buildings in Bijapur town.	2,000 0 0	1,830	0 0	Ordinary repairs	Do
Do	Hungund	Aihole	Old temples	9,747 0 0	1,816	0 0	Earth work, dry stone masonry	In progress; last expenditure Rs. 3,688.
Do.	Do.	Pattadakal	Do.	5,345 0 0	648	0 0	Clearing compound, dry stone masonry	In progress; last expenditure Rs. 1,799.
Do	Bijapur	Bijapur	Asar Mahal	3,531 0 0	2,069	0 0	Special repairs, such as fixing reinforced wall plates, etc.	Completed
Do.	Do.	Do.	Carriage road in front of Gol Gumbaz.	522 0 0	522	0 0	Blocking the road with masonry walls.	Do.
Do.	Do.	Do	Jami Masjid	40 0 0	40	0 0	Dismantling masonry from arch openings.	Do
Do.	Do.	Do.	Ibrahim Rauza	....	71	0 0	Providing rolled steel joists to the ceiling of the mezzanine gallery.	Do.
Belgaum	Saundatti	Saundatti...	Inscriptions	11 0 0	10	0 0	Ordinary repairs	Do
		Huli						
		Sogal						
		Manoli						
		Mergod						
Do.	Sampgaon	Badli						
		Neswgi						
		Bail Honal.						
		Honnikeri.						
Kánara	Kumtha	Belwadi						
		Mirjan	Do.	6 0 0	1	0 0	Cleaning slabs	Do.
Dhárwār	Gadag	Dambal	Temple of Dodda Basavana.	.....	342	0 0	Special repairs	Do.
Do.	Do.	Do.	Do.	69 0 0	69	0 0	Ordinary repairs	Do.
Do.	Karajgi	Haveri	Temple of Siddheswar.	15 0 0	15	0 0	Do.	Do
Do.	Gadag	Lakkund	Temple of Namesvara.	50 0 0	50	0 0	Do.	Do
Do.	Karajgi	Chavdanpur.	Temple of Muktasvara.	7 0 0	7	0 0	Do.	Do
Do.	Hubli	Unka	Four-porched temple	12 0 0	12	0 0	Do.	Do.
Ratnágiri*	Dápoli	Dabhol	Mosque	25 0 0	25	0 0	Do.	Do.
Do.	Málvan	Harnai	Suvarnadurg fort	30 0 0	30	0 0	Do	Do.

* These amounts were obtained by the Executive Engineer from the repair assignment at the disposal of the Superintending Engineer, Southern Division.

SOUTHERN DIVISION—continued.

District.	Tālukā.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1914-15.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Ratnágiri ...	Málvan ...	Málvan ...	Sindudurg fort ...	36 0 0	35 0 0	Ordinary repairs ...	Completed.
Do. ...	Jaigad ...	Jaigad ...	Fort wall ...	30 0 0	25 0 0	Do. ...	Do.
Do. ...	Rájápur ...	Vijaydurg ...	Fort ...	30 0 0	30 0 0	Do. ...	Do.
Sátára ...	Sátára ...	Sátára ...	Hill fort ...	.....	499 12 6	Special repairs to road to the fort.	Do.
Do. ...	Do. ...	Do. ...	Do. ...	.....	556 1 11	Current repairs to buildings.	Do.

INDUS RIGHT BANK DIVISION.

			(1) Mirza Jani Beg's tomb.			Pavement with new stones, lime plaster to wall.	Completed.
			(2) Tugral Beg's tomb.			Pavement with new stones.	Do.
			(3) Nawali Isakhan's tomb.			Pavement with new stones, lime plaster grouting with cement.	Do.
Karachi ...	Tatta ...	Makli Hill.	(4) Surfa Khan's tomb.	600 0 0	588 0 0	Lime plaster to walls, renewing tiles, etc.	Do.
			(5) Mirza Isakhan's tomb.			Lime plaster to walls, grouting with cement rubble stone masonry in compound walls.	Do.
			(6) Jami Nizam Uddin's tomb.			Do. ...	Do.
			(7) Dabgir Mosque			Do. ...	Do.
Do. ...	Do. ...	Do. ...	Isakhan's Zenana ...	1,102 0 0	584 0 0	Renewing pavement setting up fallen stones, capitals and lintels, <i>chunam</i> plaster to dome, underpinning tomb, refixing fallen stone slabs in walls and concrete under pavement, putting stone slabs in roof over pillars.	Do.
Do. ...	Do. ...	Tatta ...	Jami Masjid ...	2,502 0 0	1,813 0 0	Special repairs including grouting with cement, rerewing tiles, resetting enamelled tiles in Dado and centres of arches. Refixing inscription slabs in position, <i>chunam</i> plaster and repairs to cracked arches in clerestory windows.	Do.
Do. ...	Do. ...	Makli Hills.	Old buildings ...	120 0 0	120 0 0	Pay of caretaker ...	Do.
Larkhana ...	Dadu ...	Khudabad ...	Jami Masjid ...	70 0 0	75 3 0	Refixing tiles, earth work rammed, mud plaster 1" thick, filling in hollow in cement, jungle cutting, clearing surroundings and fixing free board.	Do.

INDUS RIGHT BANK DIVISION—*continued.*

District.	Tālukā.	Place.	Name of monument.	Amount of estimate.	Actual Expenditure during the year 1914-15.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Larkhana ...	Dadu ...	Khudabad ...	Yar Muhammad's tomb.	32 0 0	28 13 6	Chunam plaster $\frac{1}{2}$ " thick, refixing old glazed tiles, closing holes with cement.	Completed.
Hyderabad ...	Hyderabad...	Hyderabad ...	Ghulam Shah Kal-hora's tomb.	119 0 0	119 0 0	A portion of the lower roof of the main building, walls of the entrance, and some patches were repaired with lime plaster, stone pavement reset in lime and vegetation removed.	Do.
Do. ...	Do. ...	Do. ...	Gulam Nabi Kal-hora's tomb.	95 0 0	93 0 0	Roof was lime-plastered. Floor of the main building was mud-plastered, and portions of pavement were reset.	Do.

INDUS LEFT BANK DIVISION.

Nasrat Canals	Moro ...	Thul Rukan.	Buddhist <i>Stupa</i> ...	39 0 0	39 0 0	Ordinary repairs ...	Completed.
Eastern Nara.	Mirpurkhas.	Mirpurkhas.	Do. ...	152 0 0	152 0 0	Ordinary repairs and caretaker's pay.	Do.

APPENDIX M.

A Report on Conservation Works carried out in Central India.

The Resident, Indore, reports that the Indore Durbār carried out the following repairs to the Dharmanatheśvara temple and the caves, *viz.*, cleared main entrance of the temple, petty repairs to the large and small caves.

The Political Agent, Bhopal, reported that petty repairs were made to the *stūpa* under the instructions of the Director-General of Archæology in India.

The Political Agents, Pālanpur, Cutch, Morvi, Mahi Kāntha, and Gohilwād in Kāthiawār, and the Resident, Kolhāpur, and Political Agent, Southern Marātha Country, report that no expenditure on conservation of ancient monuments was incurred during the last official year in their respective Agencies.

STATEMENT SHOWING WORK DONE AND EXPENDITURE INCURRED ON
CONSERVATION OF ANCIENT MONUMENTS AT MĀṆḌU IN DHAR STATE
DURING THE YEAR 1914-15.

Locality, Town or Village.	Name of Monuments.	Amount of Estimate sanctioned.	Expenditure incurred during 1914-1915.	Description of work done.	Remarks.
		Rs.	Rs. a. p.		
	WORK DONE FROM THE IMPERIAL GRANT.				
Māṇḍu ...	Jāmi' Masjid ...	8,926	224 0 6	1 Refixed the fallen soffits of an arch in the south <i>dalan</i> .	Completed.
				2 Building up relieving to the 8th arch in the south <i>dalan</i> .	In progress.
				3 Restoring the front entrance.	Materials being col- lected.
	WORK DONE FROM DHAR STATE FUNDS.				
Māṇḍu ...	Jāmi' Masjid ...	...	248 9 6	4 Built up compound wall on south-east side.	
Do. ...	Hoshang's Tomb ...	...	45 11 0	Jungle clearing from the graves round the building.	
Do. ...	Hindola Maḥall ..	...	36 8 0	Rebuilt the fallen compound wall.	
				2 Removed rubbish from the north side and south side.	
Do. ...	Jahāj Maḥall ...	...	50 4 6	Levelled up the <i>débris</i> on the east and west.	
Do. ...	Maliq Moghi's Mosque ...	...	22 0 0	Removed <i>débris</i> from the courtyard.	
Do. ...	Rupmati Pavilion ...	...	5 5 3	Removing <i>débris</i> from the west.	
Do. ...	Baz Bahādur's Palace ..	...	18 0 0	1 Cleared rubbish from the western quad- rangle.	
Do. ...	Lal Bungalow ...	...	85 15 0	1 Cut away jungle and cleared site within the compound.	
Do. ...	Mosque near Tārāpur gate.	...	21 5 6	1 Levelled up the <i>débris</i> on the east.	
Do. ..	Hathi Pole ...	...	7 0 0	1 Removed rubbish from the building proper.	
Do. ...	Dai ki Chhoti bahin ka Maḥall.	...	27 0 0	1 Cut away jungle from the high platform round the tomb.	

APPENDIX M—*continued.*

Locality, Town or Village.	Name of Monuments.	Amount of Estimate sanctioned.	Expenditure incurred durin 1914-1915.	Description of work done.	Remarks.
		Rs.	Rs. a. p.		
	WORK DONE FROM DHAR STATE FUNDS — <i>continued.</i>				
Māṇḍu.	Dai ka Maḥall ... ..	...	36 0 0	1 Cut away jungle from the high platform round the tomb.	
Dhar ...	Lat Masjid ... ..	...	387 14 1	1 Fixed up the black marble slabs to the sides of the mimber.	
...	Kamal Moulana ... ..	...	248 4 9	1 Fixed up the black marble slabs to the sides of the mimber.	

APPENDIX N.

A Report on Conservation Work at Ajmer, Mount Abu,
and Rajputana.

The Secretary in Public Works Department, Rājputāna, forwarded to me the following statement of Archæological Works in connection with the Muhammadan buildings at Ajmer for the year 1914-1915 in the Ajmer Division:—

(a) WORKS LIKELY TO BE COMPLETED DURING 1914-1915.

Name of work.	Amount of sanctioned estimate.	Expenditure to end of 1913-1914.	Expenditure during 1914-1915.	Alloiment for 1914-1915.
	Rs.	Rs.	Rs.	
Restoration of the tomb of Allauddin Khān as "Sola-Thumba" at Ajmer.	3,781	...	3,781	Fund received from the Assistant Commissioner, Ajmer, as sanctioned by the Government of India on loan to the Dewān of the Durgah <i>ex officio</i> . Work start- ed and will be completed during 1914-1915.

(b) WORKS SANCTIONED DURING 1913-1914 AND IN PROGRESS DURING 1914-1915
BUT CANNOT BE COMPLETED DURING THE YEAR.

Nil.

(c) WORKS SANCTIONED DURING 1912-1913 BUT COULD NOT BE UNDERTAKEN
DURING 1913-1914 AND 1914-1915.

Nil.

(d) WORKS PROPOSED DURING 1915-1916.

Name of work.	Amount of estimate.	Allotment proposed for 1915-1916.	Remarks.
<i>Nil</i>	Rs.	Rs. ...	No particular work is proposed in Imperial Civil Works Budget for 1915-1916, but petty works will be attended to for which funds will be provided for from the Imperial Public Works Department grants for 1915-1916.

The Secretary in the Public Works Department forwarded to me a copy of a letter No. 320, dated the 4th March 1915, from the Executive Engineer, Mount Abu Division, to the Superintending Engineer, Rājputāna, in which he gives the following information about the repairs done to the Dilwāra temples at Mount Abu :—

VIMAL-SHAH'S TEMPLE.

The black stone lintel on the south side of the outer dome was removed and replaced by a marble one.

Thirteen flowers in the south square were replaced by new ones, as also the pendants on the south side of the Shringar Chowk and east of Chandan Chowk were carved out and fixed.

VASTUPAL'S TEMPLE.

The lintel on the staircase, reported to be ready for fixing last year, was completed, as also the lintels on the east and west of the Sabha Maṇḍapa.

The large lintel of the Chandan Chowk was taken in hand and is progressing fairly well.

The arches for Adināth's and Vastupāl's temples that were in progress are still incomplete.

Thirty-eight pairs of doors as per Mr. Cousens' design have been fixed in the Tirthankar's Cells and 11 pairs still remain to be done.

The expenditure during the year under report was stated to be about Rs. 4,000.

RAJPUTANA.

Jaipur, Kishengarh, Bundi,
Tonk, Jaisalmer, Bikaner, Sirohi,
Jodhpur, Mewar, and Shahpura.

The returns of expenditure on conservation work of ancient monuments during the last official year received from the marginally noted Durbārs are blank.

The Chhatris of old kings in the Sarbagh, Kotha, the Chandrāvati temple at Pātan, in the Jhalāwar State, and the Pal Shac Palace in the Dholpur State, received attention from the Durbārs concerned with their repairs.

(1) Baradari in the Kishenbagh at Rupbas.

(2) Usa Mandir.

(3) Tomb of Gulab Khan.

(4) Jhajri.

(5) Bajna Gumbaz.

The marginally noted monuments in the Bharatpur State were repaired by the Bharatpur Durbār in accordance with the recommendations of the Director-General of Archæology, as desired by the State Council.

APPENDIX O.

Inspection Reports.

The Executive Engineer, Ahmednagar, in his No. D.-329 of 17th April last, favoured me with the following information :—“ Owing to the press of work I was not able to inspect any of the buildings situated in the district during the last year. The only buildings I

was able to inspect were (1) Damdi Masjid and (2) Nizam Ahmed Shah's Tomb, both of which are situated at Ahmednagar and for which a special report has already been made with this office No. 3692 dated 22nd April 1914. Instructions are requested whether the estimates for the same should be prepared and sent for your sanction. I think unless the defects as pointed in my above number are remedied the inspection notes on the other buildings will only be recorded in the register of such buildings maintained in my office. Only those of such works as could not be postponed will be included in the annual report to enable you to sanction funds."

The Executive Engineer, Sholapur, reports that his predecessor Mr. A. B. de Souza inspected during 1914-1915 the forts of Sholapur and Karmala and has left a note of his inspection in the office, in which he states that Sholapur fort is in fair order, and in regard to the Karmala fort adds as follows :—"A rather good-looking parapet with walls of stone and mud, rubble filling; *khāndki* (?) facing pointed with lime. The facing is coming off here and there. Several bastions shew cracks, moat walls fallen on both banks here and there. It will require a lot of money to repair, and face would go on falling off. Rs. 50 can stop vegetation at most. But where walls are falling, they should be stopped out to arrest progress."

The Executive Engineer, Nāsik, reports that he visited Pāṇḍu lena Caves, near Nāsik, and the old temple of Mankeśvara Mahādeva at Jhodga in the Mālegaon tāluka. For the necessary conservation purposes of the former an estimate has been prepared, and for the latter an estimate is under preparation.

The Executive Engineer, West Khāndesh district, reports that he visited two monuments in his district, *viz.*, "The old gate-way in the ruined fort, and the caves at Bhamer," and found them to be in good condition.

The Superintending Engineer, Indus Left Bank Division, forwarded the following inspection report :—

"1. *Buddhist Stūpa at Thu Mir Rukan*.—This is 9 miles south-east of Daulatpur village in the Moro tāluka and is in charge of the Sub-Divisional Officer, Upper Dad Sub-Division.

"During the year under report it was inspected by the Sub-Divisional Officer on 24th March 1915.

"The monument is in good condition. An estimate amounting to Rs. 39 for ordinary repairs was approved by the Superintendent, Archæological Survey, under his No. 224 of 16th May 1914, and the work, consisting of cement pointing and burnt brick masonry to the platform, was carried out during the year.

"An allotment of Rs. 39 was granted under Government Resolution No. A-2475 of 26th February 1915 and the outlay incurred was Rs. 38-8-0.

"2. *Tomb of Nur Mahomed Kalhora*.—This is 7 miles north-east of Daulatpur village in the Moro tāluka.

"It was inspected by the Sub-Divisional Officer, Upper Dad, on the 4th March 1915, and is in urgent need of repairs owing to damages by heavy rains during the last three years.

"An estimate amounting to Rs. 194 was approved by the Superintendent, Archæological Survey, under his No. 681 of 9th July 1913, as mentioned in last year's report, but the work was not taken in hand as no allotment was received during the year under report.

"Funds will be asked for this year and if allotted the repairs will be carried out."

The Executive Engineer, Poona district, reports in his letter No. 3575 of the 9th/10th June last that he was able to inspect only the three monuments, *viz.*, caves and temple at Kārḷa, monument at Koregaon, and Dilāvarkhān's tomb at Khed, and found them in fair condition.

The Executive Engineer, Thāṇa district, in his letter No. 4875 of the 7th July 1915 reports as follows :—

“ *Temple at Ambarnāth.*—This is an old temple and is now being repaired as per estimate. The work of supporting the structure with iron work is completed, and the rest of the work is in progress.

“ *Motabar Khān's Tomb and Kālī Masjid on Shenala Tank.*—This building is in a fair condition ; the upkeep is in the hands of the Muhammadan community in Kalyān, and the work is carried out from their private funds.

“ *Franciscan Church, St. Paul's Church of Nossa Senhora Da Vida, Palace of the Captain of Bassein, Cathedral of St. Joseph, and Dominican Church.*—The special repair grant of the above buildings was withdrawn just after it was granted to this Department, but items of works were done as follows :—

“ Repairs to fallen masonry in all buildings ; rolling to the floor of the Franciscan Church ; St. Joseph's Cathedral and Dominican Church ; removing dangerous roots in masonry by experimenting with acids. Jungle growth around all buildings and inside, as well as that existing on walls, was cut down and cleared ; *cactus* growth on top of some buildings was also removed. Repairs to fallen masonry in the Captain's Palace was done. All unsightly holes and fallen cornices were repaired in a manner to look like old work. No dangerous part of any of the buildings has been found to have given way during the year under report.”

APPENDIX P.

Reports on the usefulness of Stone Cement.

The Executive Engineer, Kaira and Panch Mahāls, reports as follows :—

“ Stones 2 feet long and having section 6 feet 6 inches were broken across and then cemented together with certain proportions of cement and powdered stone as noted in the appended statement and kept wet for the number of days noted against each. They were then raised to a height of five feet and dropped on an iron rail and state of fracture noticed. The results are noted in the statement.

The tests showed :

(a) That Meyer's cement could be coloured to match the calcareous grit, the stone with which the tests were carried out.

(b) That the joints made and treated as in tests 7, 8 and 9 were about the same strength as those in tests 1, 2 and 3.

(c) That the joints tested as in tests 4, 5 and 6 were not nearly so strong as those in tests 1, 2 and 3.

(d) That the joints made as in tests 10-11 and 12 approximated in strength to those made in tests 1, 2 and 3.

(e) That Portland cement can be coloured as easily as Meyer's cement, if the stone to be imitated is of a darker hue than Portland cement.

From the experiments, it is clear that Meyer's stone cement is of a great strength and is capable of doing all the manufacturers claim for it. Its cost is against it being used for any but the most important of works, such as repairing marble slabs, broken monuments and stones accidentally chipped while being posted to their places in architectural structures. The uses detailed on the 1st page of the descriptive pamphlet give a good and fair idea of the real uses to which the cement may be put.

STATEMENT SHOWING RESULTS OF VARIOUS TESTS MADE
WITH MEYER'S STONE.

Test No.	Name of cement used in making the joint.	Proportions of cement to crushed stone.	Number of days after which tested.	Nature of fracture.	Remarks.
1 } 2 } 3 }	Meyer's	1 : 2	14	Fracture occurred generally along the plane of the joint but in places the joint had not come apart but new fractures had been made. These new fractures were distributed over the face of the joint and were about 1 square inch in area.	
4 } 5 } 6 }	Portland (Hand Brand)	1 : 2	14	Fracture occurred along line of joint.	
7 } 8 } 9 }	Meyer's	1 : 4	28	As in tests 1, 2 and 3.	
10 } 11 } 12 }	Portland (Hand Brand).	1 : 4	...	As in tests 1, 2 and 3, but joint was weaker.	

The Executive Engineer, Ghar Canals, writes :—

"The directions for the use of the cement were that it should be used in a temperature varying from 50 degrees to 80 degrees F or lower, so the experiment was made in January 1915. There being no archæological or any other buildings of stone in Larkhana, the cement was used in joining two blocks of stone and in replacing broken corner of stone blocks. It set sufficiently hard in a couple of days and formed a perfect joint, which chiselled off to a smooth surface on the 15th day when the cement mortar was found to be much harder than the Rohri stone itself. Its adhesive power seems greater than that of cement and the replaced corners were struck off with hammer without appreciable damage."

The Executive Engineer, Begari Canals, reports "that from one or two tests made with Meyer's stone cement it is found that it is a very powerful cement and probably very suitable for patching broken ornamental stone work, etc., although there was no local monument requiring repair.

Its high price renders its use prohibitive except in very special work."

The Executive Engineer, Ahmedabad District, reports that Meyer's stone cement was tried on archæological buildings and found to be effective in joining fractured pieces together.

The Executive Engineer, Thana District, reports that sufficient test has been made to judge of the value of the Meyer's Stone cement, and it is found that on the whole it is of value to repairs in ancient buildings especially where pointing work is being done; also it answers very well in cases where the joining of stone pieces are required.

APPENDIX R.

Works proposed for 1915-1916.

(From Provincial Revenues.)

The following lists of Works are proposed to be undertaken during the year 1915-1916, the latter list being arranged in order of relative urgency.—

LIST No. I.—CURRENT REPAIRS.

Serial No	Name of District.	Locality.	Name of work.	Amount.
				Rs.
1	Presidency	Gharapuri	Repairs to caves and piers at Elephanta.	2,050
2	Do.	Do.	Repairs to custodian's quarters	85
3	Do.	Do.	Repairs to assistant custodian's quarters.	11
4	Do.	Do.	Repairs to police chowki and watchman's quarters.	11
5	Ahmedabad	Ahmedabad	Pay of caretakers for archæological buildings.	800
6	Do.	Do.	Repairs to archæological buildings at, and in the District.	1,250
7	Bijapur	Bijapur	Repairs to archæological buildings.	2,000
8	Kaira and Panch Mahals.	Champanir	Pay of the watchman for Jami Masjid.	100
9	Poona	Karli	Maintenance of, and repairs to, caves.	550
10	Nasik	Nasik	Maintenance of, and repairs to, Pandu Lena caves.	140
11	West Khandesh	Balsana	Pay of the caretaker for the old temple.	12
12	Bijapur	Badami	Pay of the caretaker for the caves...	72
13	Karachi Buildings	Hyderabad	Pay of the caretaker for the tomb of Ghulam Shah Kalhora.	42
14	Do.	Do.	Pay of the caretaker for the tomb of Ghulam Nabi Kalhora.	42
15	Karachi Canals	Tatta	Pay of the caretaker for the tombs on Makli Hills.	120
16	Eastern Nara	Mirpurkhas	Repairs to, and pay of the caretaker for, the Stupa.	190
17	Thana	Bassein	Repairs to Portuguese remains in the Fort.	100
18	Kaira and Panch Mahals.	Champanir	Repairs to, and pay of the caretaker for, the Kevda Masjid.	80
19	Do.	Do.	Repairs to, and pay of the caretaker for, the Nagina Masjid.	80
20	Do.	Do.	Repairs to, and pay of the caretaker for, the Bohra Masjid.	100
21	Do.	Do.	Repairs to, and pay of the caretaker for, the Patar Rouza.	80
22	Do.	Halol	Repairs to Sikhandar Shah's tomb.	50
23	Do.	Mehmedabad	Repairs to Mubarak Sayyad's tomb at Sojali.	60
24	Karachi Canals...	Tatta	Repairs to tombs on Makli Hills	400
25	Karachi Buildings.	Hyderabad	Repairs to the tomb of Ghulam Shah Kalhora.	119
26	Do.	Do.	Repairs to the tomb of Gulam Nabi Kalhora.	125
27	Shikarpur District.	Rohri	Repairs to Satyan-Jo-Than	200
28	Nasrat District.	Moro	Repairs to the tomb of Mian Nur Mahommed Kalhora at Kubo.	195
29	Do.	Do.	Repairs to Stupa at Thul Mir Rukhan.	39
30	Poona	Bhaja	Repairs to caves	100
31	Do.	Bedsa	Do.	100
32	Do	Junnar	Do.	400
33	Nasik	Ankai	Do.	100
34	Kolaba	Kuda	Do	40

APPENDIX R—continued.

Serial No.	Name of District.	Locality.	Name of work.	Amount.
				Rs.
35	Dhárwár	Unkal	Repairs to four-porched tomb	12
36	Do.	Chavdanpur	Do. Muktesvara temple	7
37	Do.	Haveri	Do. Siddhesvara temple	15
38	Do.	Dambal	Do. Dodda Basavana temple.	69
39	Do.	Lakundi	Do. Kasivisvesvara temple...	47
40	Do.	Do.	Do. Namesvara temple	50
41	Do.	Bankapur	Do. Nagaresvara temple	10
42	Belgaum	Deogaon	Do. old temples	35
43	Broach	Broach	Do. Dutch tombs	35
44	Western Nara	Khudabad	Do. Jami Masjid	70
45	Ahmednagar	Ahmednagar	Do. Damri Masjid	20
46	Do.	Kokamthan	Do. old temple	75
47	Kolaba	Raigarh	Do. Shivaji's tomb and Mahadev's temple.	70
48	Eastern Nara	Bodesar	Do. Mosque at Bodesar	70
49	Bijapur	Bijapur	Grant to Nagarkhana Museum	324
Total				10,752

LIST No. II.—SPECIAL REPAIRS.

Serial No.	Name of District.	Locality.	Name of work.	Amount.
				Rs.
1	Bijapur	Aihole	Temples	1,500
2	Do.	Pattadkal	Do.	1,000
3	Dhárwár	Dambal	Dodda Basavana temple	422
4	Nasik	Sinnar	Gondesvara temple	1,900
5	Do.	Do.	Do. damaged sculpture.	118
6	Do.	Jhodga	Manikesvara temple	2,000
7	Kaira and Panch Maháls.	Champanir	Archæological Buildings	2,000
8	Ahmedabad	Dholka	Mosque of Balol Khan Qazi	1,100
9	East Khandesh	Patna	Mahadev temple	790
10	Thana	Kanheri	Caves	1,000
11	Bijapur	Bijapur	Jami Masjid	408
12	Western Nara	Khudabad	Do.	314
13	Do.	Do.	Yar Mahommed's tomb	179
14	Bijapur	Bijapur	Jod Gumbaz restoration	1,284
15	Do.	Badami	Caves	518
16	Dhárwár	Lakundi	Kasivisvesvara temple	305
17	Do.	Do.	Namesvara temple...	70
18	Bijapur	Badami	Temples upon the hills surrounding Badami.	490
19	Ahmedabad	Sarkhej	Archæological buildings	1,550
20	Dhárwár	Dhárwár	Do.	1,400
21	Presidency	Gharapuri	Elephanta landing pier and parapet wall.	400
22	Bijapur	Bijapur	Notice boards to protected monuments.	500
Total				19,248

(From Imperial Funds.)

Serial	Name of District.	Locality.	Name of work.	Amount.
1	Kaira and Panch Maháls.	Champanir	Archæological Buildings	Rs. 8,000

PART II (a).

EXCAVATIONS.

In my last year's Progress Report I have given a short account of the excavations conducted during 1913-14 in the Gwalior territory. A brief résumé will not be unwelcome as it will facilitate the understanding of the work done there in the following year with which this report is concerned. Nearly six years ago an

Besh.

inscription was discovered on a pillar called Khām Bābā in the village of Besh (ancient Vidiśā) near Bhilsā in the Gwalior State. It recorded the erection of this pillar as a Garuḍa-dhvaja in honour of the god Vāsudeva by Heliodorus, son of Dion, an envoy of the Indo-Bactrian king Antialkidas of Taxila to the Court of the local prince Bhāgabhadra. The inscription thus pointed to the existence, in the immediate neighbourhood of the column, of an old temple of Vāsudeva about the middle of the second century B. C., to which time Antialkidas has been assigned by numismatists. Several trenches were sunk and important results achieved. Close beside the Khām Bābā were exposed three retaining walls of an old platform on which no doubt the old shrine of Vāsudeva stood, facing the east and also the pillar, but it was not possible to trace the remaining wall or parts of this temple as this would have involved the demolition of the house of Bābājee, *pujārī* of Khām Bābā. Not far from this platform towards the south were exhumed the foundations of an old dwelling as evidenced by the fragments of tiles, pottery, nails, *haujs*, and domestic mortar. This was most probably the house occupied by the family of the worshippers of Vāsudeva's temple. Both this and the shrine platform were found enclosed by what may be called the solid railing of a unique type, not hitherto found anywhere in India. The north and south sides of it were each at its eastern end met by another railing of the ordinary type such as that represented by the one at Sānchi but much plainer. From these junctions branched off two subsidiary railings, whose foundation stones alone were exposed, but which must have originally met so as to form an entrance in front of the temple. The length of the railings alone exceeded 1,000 feet. This means that trenches were cut, which were 10 feet wide and from 4 to 6 feet deep. Besides these a good many others were sunk which exposed the shrine platform and its worshipper's residence just referred to. Another trench, much deeper than any one of these, was cut at the north-west corner of the solid railing, and I was lucky enough to light upon a line of bricks after digging down to about three feet below its foundations, which was on further excavation found to be the top of a brick wall nearly $3\frac{1}{2}$ feet high. As the season was far advanced and labour became scarce, I was not able to trace it over more than 66 feet, and had to reserve further clearing of the wall for the next season.

2. Smaller antiquities of various kinds were also discovered in numbers. Most of these were brought to head-quarters for closer study and scientific analysis which they deserved. In fact, the importance of the excavations was not fully realised until these materials were thoroughly examined and analysed. There was no time, however, to include in last year's Progress Report even a bare summary of the results of their examination which led to at least two startling discoveries. I have mentioned in that report that a trench was sunk right in front of the Khām Bābā pillar in order to determine whether it was *in situ* or not. The column, as stated therein, was found to be in position and almost on the same level as that of the railings which surrounded the temple of Vāsudeva. Beneath the column were found two iron pieces along with stone chips, doubtless inserted to steady it. One of these was sent by me for analysis to Sir Robert Hadfield, an expert on iron matters. On analysing it he found the piece to be of such unusual value and interest that in his presidential address at the meeting of the Faraday Society in November last he could not help making a prominent

mention of it. "One of the special points," he says, "is that, notwithstanding the large number of specimens of ancient iron and supposed steel I have examined during the last few years, none of them have contained sufficient carbon to be termed steel in our modern time meaning". "This specimen is probably the first to be exhibited in modern times of an ancient piece of high carbon steel which has been hardened by quenching". The results of his analysis, together with the photos. of the column and the iron piece, have been published in the *Engineer* of November 27th, 1914, which conclusively prove that the iron piece sent by me was a specimen of old genuine steel. It is impossible to over-rate the importance of this discovery. So long it was thought not only by laymen but also by archæologists that steel was unknown to Hindus of the pre-Muhammadan period, and it would have been considered the height of archæological blasphemy if they had been told that the Hindus could manufacture steel and that even so early as B.C. 140, to which date the column has to be assigned. Sir Robert's analysis, however, no longer leaves any room for doubt in this respect.

3. Another discovery equally interesting was in connection with the cementing material used in the brick wall which was exposed at the north-west corner of the solid railing three feet below its foundations and to which also reference has been made in the résumé above of the first year's work. A portion of this cementing material was sent by me to Dr. Mann, Principal of the Agricultural College, Poona, who on examining it found it to be lime mortar of the very best kind. "This analysis", says he, "gives the idea of a well-made mortar, prepared with a full recognition of the purpose served by sand and clayey matter in making the material, as well as the lime. In this respect it appears to be far in advance of many Phœnician and Greek mortars, which contain far too little sand for the best results. It approaches much more in type many of the Roman mortars." This was another startling discovery, as all archæologists were hitherto convinced that the old Hindus did not know the use of lime mortar. This was believed to have been for the first time introduced into India by the Muhammadans, and to hold, therefore, that it was known to them at such an early period as B.C. 250, to which time the brick wall has to be ascribed, was considered to be a mere figment of the imagination. Dr. Mann's analysis, however, destroys another cherished belief.

4. The other minor antiquities that were collected were as numerous as they were various, such as toys, pottery, shell bangles, antimony sticks, bone pencils, and so forth, which throw a flood of light on the domestic life of the period. The coins unearthed, however, form the most interesting class of these antiquities and materially advance our knowledge of the most ancient and indigenous money of India, the Kārshāpaṇas. No less than ninety of these coins were found, a full account of which will be found in my detailed paper on these excavations sent for publication in the *Annual Report* of the Director-General of Archæology. Besides the Kārshāpaṇas, four Kshatrapa, one Andhrabhṛitya, three Nāga, and seven Kaḷachūri coins were brought to light. Of the Kshatrapa coins that of Rudrasena II with the date 177 is important, first because this date is three years earlier than the earliest date so far known of him, *viz.*, 180, and secondly because as the last date of his predecessor Dāmajadaśrī III is 176, the date 177 appears to be the first year of Rudrasena II. The Andhrabhṛitya coin is of Gautamiputra Yajña-Śrī-Śatakarni and is of the Saurāshṭra variety. Of the Nāga coins two belong to Gaṇapati Nāga and one to Bhīma Nāga. The Kaḷachūri coins are those of Kṛishṇarāja. Coins of this king were many years ago found in the Nāsik District and also in Rājputānā, and were assigned by Cunningham to *circa* A. D. 375—400 and to a Rāshtrakūṭa king of that name. But Professor Rapson has shown that this attribution cannot possibly be correct, because first this date is too early for the type of the coins, which are evident imitations of the latest Gupta silver coins, and secondly the earliest Kṛishṇarāja of the Rāshtrakūṭa dynasty flourished C. 768 A. D., which is too late a date for this type of coins. The only king with whom the Kṛishṇarāja of these coins can be identified is Kṛishṇarāja of the Kaḷachūri dynasty. His son Śaṅkaragaṇa's copper plate grant is dated K. E. 347=A. D. 595, and Kṛishṇarāja may, therefore, be placed about A. D. 575. This suits excellently, and fully satisfies the conditions insisted upon by Professor Rapson.

5. In the résumé of the first year's operations given above, I have referred to the brick wall exposed 3 feet below the foundations near the north-west corner of the solid railing round the temple of Vāsudeva and yielding lime mortar superior to that ever manufactured by the Phœnicians or Greeks and rivalling that of the Romans. Nearly sixty-six feet of this wall I was able to trace during the season 1913-14, as stated in paragraph 43 on page 71 of my last Progress Report. The work of tracing the whole length of this wall could not be completed as the season had then far advanced and owing to the approach of the Holi days the greater number of labourers had left us. This had, therefore, to be reserved for the next cold season. The work was resumed about the middle of December last. I was confident of being able to expose this wall upto 160 feet at least, because in the trench cut in front of the Khām Bābā column were detected three courses of bricks exactly similar to those of this wall and lying in the same line with it. This confidence was fully justified, and the wall was easily cleared right upto the front of the pillar. We had laid bare scarcely 68 feet of the wall when we lighted upon two layers of stones extending over a length of 8' 9", one receding from the other as in the case of a flight of steps. A further clearing of 6 feet showed that the wall cut the foundation line of the solid railing above at an angle of 3°. We were working here 12 feet below the surface of the ground, and in order that our work might be easy and brisk it was absolutely necessary to widen the trench which revealed this wall. We had hardly broadened it 7 feet when we lighted upon another brick wall exactly similar to this one and running parallel to it. Thereupon we started clearing this new—the northern wall along with the old—the southern wall. Both the walls were laid bare without much difficulty as far as the Khām Bābā pillar, but here the work was suddenly impeded by the tombs of Bābājee's forefathers which fell in the line of the trench which revealed the walls; and as those could not be destroyed, the work of clearing the walls had to be stopped here. Leaving these tombs untouched in the middle we decided upon continuing the trench on the other side. This was accordingly done, but without success. Not a single vestige of these walls was detected. The question that now troubled our mind was: how were these walls connected with each other? They were certainly not traceable on the other side of the tombs. Did they turn towards the north or towards the south? This question could only be answered by sinking trenches on both sides of the tombs. Two trenches were accordingly cut one on each side, but these proved abortive and gave absolutely no help towards the solution. Being very much perplexed by the futility of the trenches, I made up my mind to follow the walls in their direction by cutting tunnels below the tombs one in front of each. This work was painfully slow, as for the stability of the tombs it was essential that the tunnels should be as small as possible, and could, therefore, be entrusted each to one workman only. It was this method of following the walls that turned out successful, and I was surprised to find that both the walls were joined by a cross wall 10' 4" long and almost immediately below the tombs. Both the walls were thus traced in the eastern direction, and their eastern ends determined. It was now necessary to find out how the walls ran at the other or western end. In last year's Progress Report I have stated that the southern wall was joined at this end by another which was traceable upto a length of 13'. I therefore conjectured that the northern wall also must similarly have been met by another; and a small trench on this side demonstrated the correctness of my surmise. A portion of this wall at the north-west corner was, however, found knocked out, and like the eastern wall it could be traced only over a short distance. There can be no doubt that one and the same agency was responsible for the destruction of these eastern and western walls which have broken off at very nearly the same joints. This agency I suggested last year to be no other than the floods, and this year's excavations have yielded nothing which runs counter to it. There can be no doubt that these walls originally continued over a length of at least 92 feet upto which the trench on this side was pushed. Each wall rests on yellow soil, which however rises behind it in undulations upto a maximum height of 2'. The level of the yellow soil in between these walls continues to be the same in the whole trench even where they have broken off and over a uniform width of 7' the distance which separates the two walls, showing that they had originally continued over the whole length.

6. Now, what could have been the meaning of these four walls, the north and the south walls whose whole lengths have been preserved and the east and west walls which join them and of which only small portions have survived? In the first year of the excavations when only one wall, or to speak more accurately, part of only one wall, was exposed, it was admissible to assume that it was a retaining wall of some huge platform. But the discovery of the north wall this season and above all the fact that both it and the south wall were at the east end joined by another, a cross-wall—only 10' 4" long, and at the west end by two other walls which, though now surviving upto a short distance, must originally have been very much longer, point to the conclusion that here we have vestiges, not of a stupendously long platform as surmised in the last report, but of a *nahar* or canal of the Mauryan or pre-Mauryan period. This conclusion is strengthened by the following considerations. The first of these is the fact that about the middle of the south wall were found two stone courses, one rising above the other in the form of stairs. Obviously there was here a flight of steps, flanking which on each side a thin brick retaining wall gradually rising upwards was also unearthed. Secondly, all the four walls slope upwards, showing that the batter was intended to counteract the pressure of water. Thirdly, it is worthy of note that in between these walls no pieces of pottery or other antiquities came to light. These certainly would have been found here if the walls had formed part of any structure except that for a canal. We know from the writings of Megasthenes, a Greek ambassador at the court of the Maurya King Chandragupta (Circa 300 B.C.), that in his time the State maintained an Irrigation Department with a regular system of sluices and canals. This is also proved by the inscription of Mahākshatrapa Rudradāman engraved on the celebrated Junāgaḍh rock. It speaks of a large lake called Sudarśana, which was constructed in the reign of this Chandragupta and furnished with *pranāhs*, i. e., sluices and canals, and which must doubtless have irrigated the neighbouring regions. I have little doubt that the walls I dug out on the Khām Bābā site are actual evidences of some canal of the Maurya or possibly pre-Maurya period, about which we had so long known only by inference from Megasthenes' account and Rudradāman's epigraph.

7. Simultaneously with the diggings round about Khām Bābā, excavations had been started at two other places. One of these was in the heart of the ruins of old Besh not far from the pathway leading from Udaygiri to Khām Bābā. Here was a small mound which looked very promising, especially as at its foot was found a cross-bar of an old *stūpa*. I thought that possibly it might contain the remains of a *stūpa*. This expectation was not, however, realised; but the diggings carried on here proved to be exceedingly interesting. The most important discovery here was that of three brick *jajñakunḍas* or sacrificial pits found on very nearly the same level. These are of the pre-Gupta period, indicated by the find, on almost the same level with the *kunḍas*, of a silver coin of Mahākshatrapa Īśvaradatta, who has been assigned by Professor Rapson to A. D. 236—9, but whom I would place half a century still earlier. One of these is a square, the second an oblong, and the third is like the *pinḍī* of Śivas's *linga*. The first is technically known as *sama-chaturasra* and the second as *āyata-chaturasra*. The third, I have little doubt, is the *yonī-kunḍa*. It can scarcely be seriously questioned whether these are sacrificial pits. The first two *kunḍas* have sloping sides, and the square, in particular, can from its present dimensions be inferred to have had its bottom sides in length to be almost one-fourths of the top ones and thus fulfils one of the specifications laid down in Sanscrit works regarding their construction. No ancient sacrificial pits have so far been excavated anywhere in India; this and the fact that these *kunḍas* are of such an early period as the middle of the third century A. D. make the discovery quite a unique one. The ground intervening between these *kunḍas* was no doubt covered with a brick pavement only a few traces of which are now left. It was also here and there interspersed with brick *nālikās* or drains of a very slightly lower level. One of these started very nearly from the square, and another from the oblong, *kunḍa*, and both joined into a third running towards the east. No reasonable doubt can be entertained as to these being connected with the sacrificial pits. What important part water plays in a sacrifice, whether for ablution or other purposes, it is not necessary to dilate upon here. This is not all. On the level of these *kunḍas* were also discovered foundation and upper walls of two

structures, which seem connected with them. Of these one is on the east, and the other on the south, of the pits. The west wall of the former was traced almost fully and was found to be 61' 3" long. Its south wall we followed only upto 30' 6", there being no time to exhume it further. The north wall of the second structure was originally 117' long, and its west we traced only upto 27' 6". One curious feature of this structure was a brick drain running almost over the whole length of and parallel to its north wall. Now what can be the meaning of these *kunḍas* and structures? The fact that three *kunḍas* have been found at first tempts one to suppose that they hold the three sacred fires of some *agnihotrin* of the pre-Gupta period. But a little reflection makes this supposition untenable. Because, first, these fires are placed close beside one another, whereas the *kunḍas* unearthed are very much wide apart. The *Yoni* is 8', and the square 20' 4", distant from the oblong, *kunḍa*. Secondly, of the three fires *Dakṣiṇāgni* is invariably situated on the south, and *Āhavanīya* on the east, of *Gārhapatya*. It is true that the *Yonikunḍa*, presuming that it held *Dakṣiṇāgni*, is doubtless on the south of the oblong, which must consequently be presumed to have contained *Gārhapatya*. But the third, *viz.*, the square, *kunḍa*, which has thus to be assigned to *Āhavanīya*, is, as a matter of fact, on the north, and not on the east, as it ought to be, of the oblong. For these reasons the *kunḍas* seem not to have pertained to any *agnihotrin* of the third century A. D., but to have been constructed for some special sacrifice at that early period. The structures that were also exhumed appear to be connected with it. It is worthy of note that over their whole stupendous length not a trace of cross-walls was detected indicative of rooms. Evidently they contained no rooms and were intended to be spacious halls constructed for accommodating a large number of people for some grand ceremony, doubtless the sacrifice for which the *kunḍas* were laid in the ground. It is a well-known thing that the sacrifices instituted by the Hindu kings of the ancient times lasted for months, and some for years. For the adequate performance of such rites, not only *kunḍas* but other structures also of a permanent nature were a necessity. A sacrificial site was always a meeting place of *Rishis*, *Yājñikas* and petty chiefs, who were feudatories of the ruler celebrating the sacrifice. These required to be constantly feasted, and a dining hall spacious enough to accommodate them was needed. The southern of the halls excavated here no doubt seems to have served this purpose, first because it is provided with a long running drain which is otherwise meaningless, and secondly because at its north-west corner fragments of pottery were found of such diversity and in such masses that at first I could not understand why such a vast quantity was concentrated at that particular spot. Then, again, when there was a temporary lull in the sacrificial activity the erudite and mentally restless Brāhmaṇas and Kshatriyas were fond of holding discussions and hearing recitations. The Brāhmaṇas, Upanishads and Purāṇas bristle with references to them. The philosophical discussions about *Brahma*, which make the *Bṛihadāraṇyakopaniṣad* so attractive and important, all took place during the sacrifice instituted by king Janaka. The *Vāyu*, which is the earliest Purāṇa extant, was recited by *sūta* Lomaharṣhaṇa to the Rishis who were celebrating a sacrifice of a long duration in Kurukshetra on the river Drishadvatī. Again, from Canto IV of the *Raghuvamśa* we learn that when Raghu performed the *Viśvajit* sacrifice, all his tributaries attended and joined. For all such purposes also a huge extensive hall is absolutely necessary where the sages can carry on philosophical debates and hear recitations, and where the feudatories can be received according to their dignity and rank. The other stupendous hall, referred to above, most probably fulfilled this object.

8. Another interesting find, made during the excavations on this site, consisted of twenty-six pieces of clay, bearing impressions of seal. From their shape and the distinct marks at the back it is clear that they were all except one attached to letters and documents, indited on thin wooden boards. When the boards were more than one, they were secured with strings laid crosswise and tied together into a knot, as is evident from some of these marks. The strange fact connected with the seals is that they were all found in or near the halls of the pre-Gupta period referred to above. The palæography of the letters impressed on them points to the same conclusion. Almost all of these seals contain the names of private individuals. One, however, bears the official designation: *Haya-hastyaadhikārī*, i. e., an officer in charge of horses and elephants, and another has

the legend : °*śya Mahārāja-Viśvāmitrasya svāminah*, i. e., of the lord Mahārāja Viśvāmitra. Who this prince Viśvāmitra was is not known. All these seals except one have got marks of the strings or wooden boards or both on their back showing that they were affixed to letters which had come to the *Yajñaśālā* or sacrificial halls from outside. The exception is a seal which bears no such marks at all and which must consequently have pertained to the place where it was found. It seems to have been a passport to the *yajñaśālā* and to have been dropped by a visitor there. The seal bears on it the following legend in two lines: (1) *Ṭimitra-dātrisya[sa]ho(ta)* ; (2) *p(o)tā-mamtra-sajana[?i]*. The meaning of it is not yet quite clear to me, but the words *hotā*, *potā* and *mamtra*, which are technical to sacrificial literature, indicate that the seal is really connected with the *Yajña-śālā*. And the import of the seal appears to be: "Of the donor Ṭimitra, accompanied by the Hotā, Potā, hymn-kinsmen and . . ." Ṭimitra doubtless is a name, and must be the Sanskritised form of the Greek Demetrius. And it appears that this Greek Demetrius was the *yajamāna* who instituted the sacrifice and was responsible for the construction of the *yajña-kunḍas* and the halls. The performance of a Brahmanic sacrifice by a Greek is no longer a thing that ought to surprise us, because we know that many Greeks like other foreign people such as Śakas and Palhavas had embraced Hinduism. In my last year's report I have already stated that the Khām Bābā pillar at Besnagar itself was, as is evident from an inscription engraved on it, set up as a *Garuḍa-dvāja* in honour of the Hindu god Vāsudeva by a Greek ambassador, Heliodorus, who calls himself a Bhāgavata or devotee of Vāsudeva. Nay, another indication of Greek habitation on this site is not wanting. Here was found during excavations a mould of steatite stone for casting a medal. That it is a mould is clear enough, I think, from the fact that on one side but at the top there are two holes one at each end and on the other but down below a depression in the centre for letting in molten metal. There must have been another stone piece like this with similar holes and depression. The two must have been made fast one to the other by means of cords passing through the holes, and the cavity formed by the two depressions, one coming over the other, must have facilitated the passage of molten metal which was poured from these ends. One face of this mould has the negative form of what looks like the obverse of an Indo-Bactrian drachma, bearing the bust of a king diademed and turned to the right. It is shown hanging from a rod, two strings from which are made to pass immediately behind the top of the bust. The other face of the mould stone holds the negative form of the caduceus of Hermes-Mercury, also suspended from a rod. The first face, therefore, represents the obverse of one medal and the second the reverse of another. The workmanship of the moulds is by no means of an inferior kind, and the carving of the characteristically Indo-Bactrian bust and especially of a caduceus stamps it as the work of a Greek artist and also indicates that it could have been in the possession only of a Greek artisan who stayed here. Another object which was discovered on this site and which deserves to be mentioned is also a mould, but of a fanciful figure consisting of two heads and one common animal body. One head is of a fabulous animal with horns and gaping jaws and the other of a human being bare and with a beard. On the other side of this mould has been engraved *Huvilasya* (i. e. of Huvila) in characters resembling those on the seals. This mould is on steatite stone, but the stone appears to be a fragment of some fractured steatite vessel.

9. The third site that had been here taken up for excavation was the north end of the ridge of the Udaygiri hill, which is nearly one mile from the present village of Besh. When I first visited the place in November 1913, a large mound thickly overgrown with jungle attracted my attention chiefly on account of the remains of a pillar close by, also noticed by Cunningham when he visited Besh. I also observed a trench sunk in the centre of the mound some time ago, no doubt, with a view to excavate here. On making enquiries I learnt that Mr. Lake, Superintending Engineer of the Gwalior State, was responsible for it. He seems to have conceived this mound to contain the ruins of a *stūpa*, to expose the relic casket from which he had cut the trench. A close examination of this site, however, convinced me that we had not the ruins of a *stūpa* here. Nevertheless, I made up my mind to excavate it, and operations were started about the close of

February 1914. As no definite and tangible results were achieved by the middle of March following, no account could be given in last year's Annual Progress Report. The excavations were, however, resumed in December last and brought to a termination about the beginning of February following. Here was laid bare a platform approximately 118' long by 70' broad. On this stood a temple of somewhat late Gupta period, facing the east. On the north and south sides of the platform were exposed three subsidiary shrines. Nothing beyond the foundation walls of the principal temple and the attendant shrines now survives. At the south-east corner of the platform stood a pillar which is now found broken into five parts. The rough square base is still *in situ*, but, instead of being concealed underground as it was originally intended, is now lying exposed, owing to a pit having been sunk here by some treasure hunters to get at the treasure hidden below. The upper shaft, which is round, remains on the ground not far from the base. The capital, which is bell-shaped but typical of the Gupta period, has fallen below the hill and is not far from the Amrita Cave, which is the northernmost cave excavated in the Udaygiri hill. The abacus is carved into twelve compartments, containing the twelve Ādityas or Suns, the twelve *rāśis* or zodiacal signs and the thirty Nakshatras denoted by pellets. The capital was no doubt surmounted by a standing figure, the torso of which was found on the west, and the fragment of halo surrounding whose head on the north, of the platform. Both the faces of the halo are carved. One side is decorated with a large *chakra* or discus, and is more roughly sculptured than the other which contains a large lotus surrounded by a circular band split up into a number of panels containing Sūryas flanked by females riding on various animals, such as the swan, horse and ass.

10. The temple belongs to the later Gupta period, and, as just stated, nothing was traceable on the platform except the foundation walls of its shrine, hall and porch. But in the *débris* surrounding it fragments of door jambs, door lintels and roof slabs were found in large quantities, from which it is possible to imagine what the temple was like originally. No pieces of the spire, however, came to light, and it seems that it was a flat-roofed structure like other temples of the Gupta period. The ruins show that a deliberate attempt was made at laying waste this holy site, for otherwise the wholesale destruction of the temple, its attendant shrines and the column is inexplicable. It is not difficult to determine approximately the time when this must have come off. In front of the Amrita Cave alluded to above are standing a few pillars, which are now the only remnants of a porch that was constructed before it. These are exactly like those unearthed on the site of this temple. A little excavation here brought to light other sculptures and roof slabs, convincing us that its porch was built at some later period and unquestionably out of the materials of the Gupta temple on the hill top. This temple must, therefore, have been in ruins when the cave porch was put up. Now, in the Amrita Cave there is an inscription dated V. S. 1093 (= A. D. 1036-7) which speaks of the cave temple being restored by one Kamnha. There are absolutely no indications of reconstruction in the cave proper. The restoration must thus refer to the installation of an image in the cave and the building of the porch before it. As most of the materials used for the latter were, as just remarked, brought from the remains of the Gupta temple above, the devastation of this structure must have taken place prior to A. D. 1037. Is it possible that one of Mahammad Ghazni's raids was responsible for it?

11. The inner core of the temple platform is not a solid mass of stone construction as might be expected but a network of rubble stone walls packed dry, the intervening spaces being filled with well-rammed brickbats. Most of these hollows were cleared by me with a view to expose remains of any structures that might have stood on this spot anterior to the building of the temple. Nothing of a very sensational character was brought to light, but enough was found to justify the conclusion that the site was occupied by one *stūpa* at least and some dwelling houses of the pre-Gupta, perhaps of the Śuṅga, period. Traces of the first were exposed below the east wall of the platform. In fact, this wall, when constructed, was made to stand upon the two lowermost stone courses of a *stūpa*. From its segment now preserved the original diameter of its base seems to have been at least 16' 8". Indications of the dwelling houses we lighted upon all along the north wall of the platform, especially at the north-west corner. These

consisted of a layer of ashes intermixed with iron nails topped by another of tile pieces, both running together all round in undulations, showing that the houses here were of wooden construction.

12. From Besnagar in the Gwālior territory I went to Tāṇḍo-Mahammad-Khān in the Hyderābād district, Sind. The mound which I excavated here was nearly 6 miles to the north by west of this place and is locally known as *Sudheran-jo dhāḍo*. There was a Hindu king, they say, called Neru who was reigning at Hyderābād. He had a nephew called Sudheran who was noted for his exceptionally handsome features. Once he happened to enter his uncle's zenana not knowing that the queen was there. The queen saw him and was smitten with his beauty. She made advances to him which he steadfastly refused. She went in a huff to the king and poisoned his mind. He issued orders to forthwith arrest his nephew who ran for his life till he came to this place. Being tired of running away, he prayed to Mother Earth to grant him refuge in her bosom. The earth was suddenly rent, and he was swallowed up. The people raised a tumulus over this place, which thus became reputed as *Sudheran-jo dhāḍo*. When the queen died, they also burned her body here, and the mound on the south-west of Sudheran's is said to contain her mortal remains. Sudheran's mound is worshipped by the Hindus who come from villages even 60 *kōs* distant. It is a place of worship in particular with the bania castes Utrāḍi and Lāḍāi. The local Hindus also come and dance on the 22nd day of Śrāvaṇa when the fair is held. Half of the offerings are claimed by a Fakir who lives close by and the remaining half by a Brāhmaṇ of Tāṇḍo. The worship here is never believed to be complete until the worshipper selects seven or eight tiny clods of earth from the bigger or Sudheran's mound and pelts them on the smaller or queen's mound, uttering the words: "May these pieces strike you hard as punishment for the persecution practised by you."

13. I experienced very great difficulty at the outset in obtaining the requisite number of coolies to excavate at this place. The difficulty was caused by the superstitious but popular belief shared by Hindus and Muhammadans alike that the mound was the resting place of a stupendously long cobra. Allusion to this superstition has already been made in p. 7, para. 21. Suffice it to say here that although the number of coolies I obtained on the first day was a small one I was lucky enough to light upon the walls of the *stūpa*. Once the trace of the walls was obtained, it was a comparatively easy matter to trace them all round. The walls, when thoroughly laid bare, were found to form four sides of an oblong, the larger being nearly 98' and the smaller 76', long. This was rather surprising, because the plinths of all the *stūpas* I have known are either round or square, and never oblong. Traces of the moon-stone were found in front of the north wall, showing that the *stūpa* faced this direction. The maximum height of the present walls is nearly 10', and is preserved in the west wall. They are in too dilapidated a condition to enable us to restore fully their original elevation. In the *débris* removed to clear the walls, many sculptured pieces were brought to light of almost identical types with those unearthed by Mr. Cousens at Mirpur-Khās. Some of these are no doubt fragments of the decorative borders of the wall niches, no trace of which, however, has now remained. Others are closely similar to those found in the ornamental course near the bottom of the basement of the Mirpur-Khās *stūpa*. But the basement of the Tāṇḍo-Mahammad-Khān *stūpa*, which is well preserved, has no such string course running anywhere on it. It is, therefore, somewhat difficult to determine where these bricks had originally been used.

14. I refrain from further describing here the results achieved during these excavations, as a full account of them will appear in the Director-General's *Annual*.

PART II (b).

ORIGINAL RESEARCH.

15. In para. 23 of p. 8 of the Administrative Part, I have made mention of certain eight Kshatrpa inscriptions, of which two are now in the Watson Museum, Rājkoṭ, Kāthiāwār, five in the Fergusson Museum at Bhuj, and the remaining one at Khārdā, the place from where the Bhuj inscriptions were brought. Of these eight records, five belong to the time of Rudradāman, two of his son Rudrasimha, and one of Rudrasimha's son Rudrasena. Four of Rudradāman's epigraphs are all dated in the [Śaka] year 52, second day of the dark half of Phālguna. The name of his great-grandfather here given is most clearly Ysāmotika, and not Ghsamotika as proposed by Professor Rapson. The conjunct consonant *ysa* in this name is singular and is an attempt to represent some foreign sound which the Greek Z in such names as Zeonises is intended to express. I have no doubt that the name of the son and successor of Rudradāman must similarly be supposed to be Dāmaysada, and not Dāmaghsada as read by this numismatist. The fact that sometimes his name is also written Dāmajada is additional evidence, because *ja* may like the Greek Z to which it approximates be used to represent the Scythian sound denoted by *ysa* but not by *ghsa*. All the five inscriptions of Rudradāman record the erection of *yashṭis* or *lashṭis*, i.e., sepulchral stelæ. The first speaks of a stone upright put up in memory of one Ṛishabhadeva, son of Sīhila and belonging to the Opaśati clan (*gotra*) by his brother Madana. The second preserves the memory of Yaśadatā, daughter of Sīhamitra and of the Sinika *gotra*, and the stela was erected by her husband Madana, son of Sīhila. Yaśadatā is called Sāmanerī and appears to have been a Buddhist nun at the time of her death. The third inscription stone perpetuates the memory of Jyeshṭhavirā, of the Opaśati *gotra*, daughter of Sīhila and sister of Madana who set it up. The fourth is a memorial stone of Ṛishabhadeva of the Opaśati *gotra* and son of Treshṭadata erected by Madana, his brother. This is rather puzzling, because the *gotra* Opaśati and the name Madana point to this Ṛishabhadeva being the same as that of the first inscription, Treshṭadata being in that case presumed to be the other name of their father Sīhila, but it is inconceivable that two stelæ were put up or can be put up in memory of one and the same individual. The fifth inscription of Rudradāman unfortunately has not its date well-preserved. The unit figure 3 is clear, but the decimal has entirely chipped off. The day and the month however are legible and are the New Moon day and Śrāvaṇa. The name and *gotra* of the individual for whom the memorial stone was put up have not been preserved. He appears to be the son of Śatrunisaha and his stela was raised by his son Dhanadeva.

16. Of the two inscriptions of the time of Rudrasimha one is dated 103 and the other 114. The former has been edited by Bühler in *Indian Antiquary*, Vol. X, pp. 157-8, but his reading is faulty in many important points. The date deciphered by him is 102, but, as a matter of fact, is 103 both in figures and words. His reading of the month, viz., Vaiśākha, and of the day, viz., 5th of the bright half is correct, but the *nakshatra*, according to him, is Śrāvaṇa when it is clearly Rohiṇī in the inscription. It records the digging and building of a *garta*, most probably a well, in the village of Rasopariya by the general Rudrabhūti, an Ābhīra and son of the general Bāpaka and not Bāhaka as read by Bühler. It is worthy of note that when this epigraph was engraved, Rudrasimha was occupying the lower rank of Kshatrpa. The other inscription speaks of him as a Mahākshatrpa, is dated *varshe 114 Jyeshṭhāmūla-dvādaśī*, and records the erection of a *yashṭi*. It is not, however, clear to whose memory the *yashṭi* was put up. The last Kshatrpa inscription gives the date *varshe 125 Bhādrapada-bahulasa 5*, and refers itself to the reign of the Mahākshatrpa Rudrasena. This record was first edited by Dr. Bhau Daji (*Four. Bomb. As. Soc.* Vol. VIII, pp. 234-5) and afterwards by Dr. Hoernle (*Ind. Ant.* Vol. XII, pp. 32-4). Curiously it never occurred to any one of

these scholars that the last line, *i. e.*, line 6, of their transcript was by itself incomplete and that there were at least four letters in the next line which rendered the whole sense clear and complete. The lines which contain the real purport of the inscription have also been perfunctorily deciphered. It is very difficult to read them from the original stone, but I had the advantage of Nāsik paper estampages, which have enabled me to read these lines with perfect confidence. For the information of scholars who are interested in the study of Kshatrapa epigraphy I reproduce them here :—

line 5 [i]dam Śakri-

line 6 mānasa-sagotrasya Pratāśakaputrasya Kharapītthasya bhāttrabhih
utthavita sva-

line 7 [rggasakhartha].

The record thus purports to say that this, *i. e.*, the stone upright on which it was engraved, was erected to the memory of one Kharapīttha son of Pratāśaka and of Śakrimānasa *gotra* by his brothers for his happiness in the next world. Evidently the inscription stone, like those of Cutch, is a sepulchral stela.

17. A most interesting discovery, made in the Gwālior territory during the last touring season of Mr. Garde, Inspector of Archæology, Gwālior, for listing purposes, is the identification of the ancient Padmāvati with Pawāyā also called Pol Pawāyā or Padam

Padmavati-Pawaya.

Pawāyā, a small village nearly 15 miles south-west of the Dabrā Station on the Midland Section of the G. I. P. Railway. Padmāvati is mentioned by the *Vishṇu-Purāṇa* along with Kāntipurī and Mathurā as one of the seats of Nāga power. The scene of the play *Mūlati-Mādhava* by the celebrated Sanskrit poet Bhavabhūti is also laid at Padmāvati. From the clue to its geographical position afforded by him in two places in the drama, Padmāvati appears to have stood at the junction of the Sindhu and the Pārā, that another river Lavaṇā flowed close by, and that a fourth called Madhumati joined the Sindhu not far off. The rivers have been correctly identified by Sir A. Cunningham. Sindhu is, of course, the Sindh; and the other rivers which flow in the vicinity, *viz.*, Pārā or Pārbati, Luṇ or Nuṇ and Mohwar or Madhuwar, correspond to the Pārā, Lavaṇā and Madhumati of the play respectively. Padmāvati, however, he identifies with Narwar. But this identification cannot be correct, because Narwar does not stand at the confluence of the Sindhu and Pārā, and is situated more than 20 miles away from it. The only place which satisfactorily answers to these geographical particulars is Pawāyā which stands in the apex between the two converging rivers Sindh and Pārbati. The river Nuṇ also flows at a distance of about 5 miles, and the confluence of the Sindh and Mohwar is perhaps still nearer. Geographical considerations alone are not in favour of this identification. From the view point of philology also, Padmāvati can easily run into Pawāyā. At Sarwāyā, 35 miles from Pawāyā, Mr. Garde found an inscription giving Sarasvati as the old name of the place. If Sarasvati can become corrupted into Sarwāyā, the change of Padmāvati into Pawāyā is perfectly intelligible. The local legends also speak of Pawāyā as part of the old Padmāvati Nagari. The archæological remains too that are found here point to the great antiquity of the locality. Numerous coins of Nāga princes are brought to light during the rains. Amongst the sculptures which are still on the surface of the ground, the palm leaf capital and an image 5 feet high are particularly noteworthy and are doubtless indications of an early age. The first which strongly reminds one of an almost exactly similar capital now lying in the Besh Museum must like it be assigned to the pre-Gupta period. The image has an inscription incised on the pedestal in characters of the first or second century A. D. It is dated in the fourth year of a king called *svāmi* Śivanaṁdi, and records the installation of the image of Maṇibhadra by a *goshṭhi* or committee, the names of whose members are specified. All things considered, the identification of the classical Padmāvati may now be taken as established beyond all possibility of doubt.

18. On p. 8 of the Administrative Part of this Report, reference has been made to the discovery of a copper-plate grant at Sangoli near Bailhongal in Belgaum by Mr. K. N. Dikshit during the course of his tour in the Kanarese districts. As the plates are of more than

Sangoli Plates.

usual interest, a summary of their contents is given here. They record a grant, issued by king Harivarman of the Kadamba dynasty, from Vaijayanti during the eighth year of his 'prosperous reign,' on the no-moon day of the month of Āśvina, which was the same as the equinox day. The grantees were 23 Brāhmaṇs of 8 different *gotras*, all of them masters of the Atharva-veda. The village granted was Tedava, more particulars of which are not given in the grant, nor can it be identified now with any modern village.

19. The importance of the grant lies in the fact that it is exclusively Brahmanical in its character, whereas, as all the Kadamba grants, hitherto known as belonging to Kakutsthavarman and his descendants Mrigeśavarman, Ravivarman and Harivarman, are concerned with Jainism. (*Vide* "Halsi grants," *Indian Antiquary*, Vol. VI, p. 22 ff; "Devagiri grants," *Ibid.* Vol. VII, p. 33 ff.)

20. In the present record, the opening verse is addressed to Śiva, while in the older grants, it is dedicated to Arhats. The king is here described as *dvijāti-śuśrūṣhā-parāḥ*, i. e., "keen about the service of the twice-born," i. e., Brāhmaṇs, and as *Parama-Māheśvaraḥ*, i. e., "a great devotee of Śiva;" while on the other hand such attributes, especially the second one, are rare in the earlier records. Moreover, this is the only early Kadamba record, in which a village is granted to Brāhmaṇs. Even the other two records of Harivarman, from Halsi, issued during the 4th and 5th years of his reign respectively are strictly Jaina in character. It would appear, therefore, that Harivarman changed his faith some time between the 5th and 8th years of his reign.

21. In para. 25 of p. 8 above, I have alluded to an important hoard of Kshatrapa coins discovered at Sarvāṇiā in the Sarvāṇiā hoard. Bānswārā State, Rājputānā. During the year under report, I had the good fortune of examining it as carefully as my leisure could allow. As the results of my study are sure to be of some interest to antiquarians and numismatists, the following tables have been given here. My detailed paper on this hoard will appear duly in the *Archæological Annual* of the Director-General.

Dates on coins of the Western Kshatrapas from the Sarvāṇiā hoard.

Name of Prince.	Dates.
MK. Rudrasimha I	10[1], 10[5], 114.
K. Rudrasena I	121.
MK. Rudrasena I	135, 139, 142.
MK. Saṅghadāman	14[4].
MK. Dāmasena	150, 152, 1[5]4, 155, 157.
K. Dāmajadaśrī II	155.
K. Viradāman	158, 159, 160.
K. Yaśodāman	160.
MK. Yaśodāman	160
K. Vijayasena	160, 16[1].
MK. Vijayasena	161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172.
MK. Dāmajadaśrī III	17[2], 173, 174, 175, 176, 177.
MK. Rudrasena II	178, 179, 180, 18[1], 182, 184, 185, 186, 187, 188, 189, 190, 191, 194, 197, 19[8].
K. Viśvasimha	197, 198, 199, 200.
MK. Viśvasimha	200.
K. Bhartṛidāman	200, 201, 202, 204.
MK. Bhartṛidāman	204, 205, 206, 207, 209, 210, 211, 212, 213, 214, 215, 217.
K. Viśvasena	20[6], 215, 216, 217, 21[9], 220, 221, 222, 223, 224, 225, 226.
K. Rudrasimha II	226, 227, 228, 229, 230, 231, 232, 234, 235, 236, 237, 238.
K. Yaśodāman II	238, 239, 240, 241, 242, 243, 244, 245, 24[7], 254.
MK. Rudrasena III	270, 272, 273.

TABLE SHOWING THE DISTRIBUTION OF DATED AND UNDATED COINS
FOR EACH PRINCE, FROM THE SARVĀNIA HOARD.

Name of Prince.	Title (whether Kshatrapa or Maha- kshatrapa).	Period of rule (in Kshatrapa era).		Number of coins.			
		From	To	Dated.	Undated.	Illegibly dated.	Total.
Rudrasimha I	MK	103	110	4	...	...	4
Rudrasena I	K	113	118	1	...	...	1
Do.	MK	121	122(?)	8	1	...	9
Saṅghadāman	"	122	144	1	...	...	1
Dāmasena	"	144	145	12	...	...	12
Dāmajadaśrī II	K	145	158	2	...	...	2
Vīradāman	"	154	155	17	...	...	17
Yaśodāman	"	156	60	1	...	1	2
Do.	MK	160	161	4	...	...	4
Vijayasena	K	160	161	10	...	1	11
Do.	MK	161	172	96	12	...	108
Dāmajadaśrī III	"	172(?)	177	52	15	...	67
Rudrasena II	"	177	199(?)	220	159	13	392
Viśvasimha	K	197	200	52	65	1	118
Do.	MK	200	...	1	26	3	30
Do.	Uncertain.	...	...	3	28	...	31
Bhartridāman	K	200	204	49	95	...	144
Do.	MK	204	217	160	159	43	362
Do.	Uncertain.	...	...	3	123	...	126
Viśvasena	K	206(?)	226	177	138	80	395
Rudrasimha II	"	215	238	90	64	8	162
Yaśodāman II	"	226	254	121	21	15	157
Rudrasena III	MK	238	270	25	8	11	44
Iśvaradatta	"	286	300	6	...	...	6
(Father's name only visible :—		1st year of his reign.	2nd year of his reign.				
Rudrasimha I	MK	...	...	4	...	...	4
Dāmasena	"	...	...	3	1	2	6
Rudrasena II	K	...	...	...	8	3	11
Do.	MK	...	...	2	32	...	34
Do.)	Uncertain.	...	...	6	52	...	58
(Only one name preserv- ed :—							
Rudra(sena)	...	...	...	...	4	...	4
Bhartridāman)	...	...	...	1	1	...	2
(Unidentified)	...	...	...	...	13	...	13
(Struck only on the obverse).	...	...	...	12	27	17	56
				1,143	1,052	198	2,393

PART III.

CONSERVATION COMMENTARY.

Again, nought of noteworthy interest is to be recorded among the works of conservation undertaken in this Circle during the year under report. Relevant particulars, in tabulated form, are given in Appendix of all works under execution, which were undertaken either at the instance, or with the approval, of this Department; and it is to augment, in the few instances desirable, the necessarily brief particulars there given that the following remarks are contributed.

2. Mention is also made of monuments visited in the course of a cold weather "conservation tour", which may have a casual interest for the reader; and other incidental matters which present themselves in this connection are further noticed here.

3. This collection of temples, described at some length by Tod in his *Annals and Antiquities of Rajputānā*, Vol. II, pp. 670-679, is disposed in two groups, of which that to the east is by far the better preserved. In fact, this group of temples, consisting of a dominating central shrine dedicated to Śiva and flanked by subsidiary shrines disposed, however, in no architectural relation, is in a remarkable state of preservation, both as to its original completeness and the cleanly incised condition of its very excellent ornament and sculpture.

4. The sculpture, which is really deserving of such designation, has been badly mutilated by the wanton Islamite, but where it has been spared, exhibits an appreciation of the subtleties of human anatomy, so exceptional in such images as to be, indeed, worthy of comment. The carving, too, of the *śikharas* especially, is as cleanly sharp and flowing as upon the day of its execution, and this is due, to a very great extent, to the preserving agency of the all-obliterating lime-white that forms a coating almost an inch thick in places, and in the fallen patches of which the forms of the carving can be observed in all their delicacy. The main shrine, and that of *Ashṭa-Mātā* immediately adjacent to the south-west, remain practically complete in all their detail, though the floor paving in each case reveals the very considerable settlement that has taken place since the erection of these temples.

5. In the more eastern group there is one exceptional example of a shrine—dedicated in this instance to Gaṇeśa—the *śikhara* of which is designed in a combination of brick and stone. It is now badly dilapidated, the original carved brick *śikhara* being almost totally gone; but sufficient remains to show its combination with the stone work of the lower walls and with the moulded string courses from which it springs. The effect at present is rather disjointed, since no attempt is made in the design to weave the one material into the other, but it is probable that the more readily decorated brickwork was originally coated with a fine cement plaster which would have avoided this aesthetic contrast of the materials.

6. A similar example, almost identical and equally dilapidated, forms one of the lesser group to the west of the above.

7. A note upon necessary measures of conservation of a simple, though comprehensive, nature has been drawn up and submitted to the Director-General of Archæology in India for communication to the Udaipur Darbār, through the usual official channels. The principal causes of dilapidation here are a badly drained site and a general settlement of foundations, and recommendations have been made for the remedying of this.

8. One temple of this group, the shrine of *Ashta-Mātā*, while singularly intact with regard to its individual members, has suffered to a considerable extent from this cause, with the result that the front porch has settled badly and is separated from the main walls by an open joint towards its top of some 3" in width. Evidence of this sinking is further contributed by the appearance of the porch paving, which is badly buckled under the front columns and generally very uneven. One of these columns is bedded upon the now decidedly sloping top of such a paving stone, which fact alone is not reassuring with regard to its possible further dilapidation.

9. In this case, I have suggested the application of glass strips to be cemented severally across the open jointing in the affected portions as a test for further dilapidation; which, if occurring, I fear can only be remedied by substantially dismantling and rebuilding.

10. In front of the main shrine stands an open pavilion referred to by Tod (*ref. supra*) as a Nuptial Hall, though it suggests itself to me as the original *habitat* of the *nandi* now squeezed into the narrow path separating the temple and this pavilion; and I have recommended that the *nandi* be removed therein and set up to face the shrine. As an architectural adjunct it is, as at present disposed, quite unrelated to the general plan, and simply blocks the narrow pathway to the entrance of the shrine. It appears to have been removed from its original setting to accommodate in the front pavilion the displaced original *linga* from the main shrine.

11. In June last I paid another visit to the temple of Gondeśvar to inspect the images which had been wantonly damaged by some persons who have not, I understand, yet been brought to account. These damaged images, which are not remarkable for their excellence as sculpture and exhibit generally the disintegrated surface of long exposure to the weather, are six in number; but in most cases the broken fragments were available for their repair, which has since been undertaken.

12. In common with the other two monuments at Dholkā this *masjid* has suffered considerable structural detriment in the past, and its four walls are now bulged and somewhat inclining in many local instances.

13. Particularly is this the case with the rear west wall where, towards the top, every bay between its projecting *mihrab* masonry is badly bulged. Towards the south end of the east façade, too, the outer masonry facing has been forced forward by movement in the inner rubble core; but in no instance, as far as is apparent, has the inner facing of the mosque interior suffered in this respect, the bulgings being all located externally.

14. I do not anticipate that the dilapidation will come any worse, however, for the settlement appears to have taken place some long time ago. I have recommended that these bulged projections should, nevertheless, be tested by the application of glass strips across the open jointing, and by carefully noted measurements with a plumb line, to settle this point as far as possible before active measures of repair are taken in hand.

15. The mosque, internally and externally, is badly disfigured with the inevitable limewhite, covering the delicately incised *nakshi* carving, panelled in the projecting *minars*, and wrought so profuse'y about the *mihrab* recesses and high clerestory plinth.

16. An excellently wrought *mimbar*, with stair and chamber beneath, also suffers badly in this respect, and I have asked that this disfiguring limewhited coating be carefully and completely removed.

17. Shaken by an earthquake long prior to living memory, this *masjid* also is badly shattered, and appears, at a casual glance, to be ruined beyond structural reparation. Huge dividing fissures appear in threatening profusion about walls and domes, and in the initial shock, the greater part of the original east arched façade—all, in fact, but the remains of the two end pylons—has wholly disappeared.

18. This mosque, in its original entirety, must have been most imposing in design, if only on account of the vast scale of its building. The *motif*, as can still be traced from the ruined remains of the entrance façade, was one of three great arched bays spaced between huge square impost pylons, the whole merging above into a plain square front, panelled with ornamented plaster in elaborately patterned *nakshi*, and crowned by unbroken *chajja* and *kanguras* above.

19. There remain yet, in isolated patches, pieces of the elaborate and exquisitely wrought plaster-patterned surface which, from the many traces left profusely about the walls, must originally have covered vast surfaces of the mosque façades.

20. The whole construction is one essentially, and appropriately, of brick, covered with a surface skin of plaster.

21. Close scrutiny of this apparently fast dilapidating fabric does not, fortunately, tend to confirm one's fears for its immediate safety.

22. The gaping fissures in domes and walls have remained, it would appear, from the original disturbance without appreciably further distending; for the inserted cement repair in the outer cracks in the domes, tentatively undertaken some ten or twelve years ago, still wholly fills the fissures and lends no evidence of newer cracks opening beside the cemented filling.

23. To settle as satisfactorily as possible, however, whether active measures of repair may be profitably undertaken to these shattered parts they will be tested in the manner previously described to ascertain if further dilapidation is to be apprehended.

24. If, as I anticipate, no further movement be noted, the fissures will be packed with fine Portland cement concrete and the fabric immediately adjacent thoroughly saturated with Portland cement grout of thin consistency to ensure a sound homogeneous repair.

25. Externally, where at the east façade the fall of the impost pylons has left great shallow gaps in the original facing about them, I have recommended that the exposed core be faced with old brick similar to the original in shape, size and treatment. At the back of the fallen pylon the slightly recessed "toothing" patent in the lower portion is to be maintained above to indicate the original existence of such a buttressing brick support, and leave some clue to the original design of the façade.

26. In one or two minor instances, threatening blocks of brickwork, almost detached by encircling open cracks, will, perhaps, have to be dismantled to anticipate their fall.

27. The sole remaining *chattri*, perched upon the roof of the southern pylon, appeared in some aspects as viewed from the ground, to be precariously unstable, for one of its four-square arched impost supports has wholly disappeared. Its fall was occasioned by the original earthquake shock, however, and upon detailed examination at close quarters one is considerably reassured on this point, as the main weight falls directly upon the remaining impost pillars, and the corbelled support provided from them to the somewhat overhanging remainder appears as amply sufficient for the purpose as is evident from the survival of the *chattri* up to the present time.

28. I have asked for the personal opinion of the Executive Engineer on this point, however, so that measures for further support may be undertaken, if its safety appears to him at all questionable.

29. From the immediate rear of the mosque extends a vast tank, octagonally planned, with two sides of the eight meeting in a straight line to form a parallel water-front to the rear façade.

30. This tank is complete in itself, and is still filled with water, covered with the flat leaves of water-plants; and at the far junction of its converging sides has been placed a triple outflow sluice, architecturally treated with flanking projections to a range of central circular openings.

31. Much of the masonry of tank and sluice has been disturbed, but a great deal remains lying where thrown, and I have recommended that this be re-set in its obvious positions.

32. Upon my visit I found that each tomb, over its whole surface, had been coated with paint of a strange chocolate tint, the intention being as explained by the local Public Works Department Sub-Overseer, to restore the tombs to an assumed natural tint, after their previously condemned treatment with limewhite.

Dutch Tombs, Broach.

33. The effect was not agreeable, and I have recommended that the present coating should be left to disappear under the saving action of the weather, any cemented repair that may meanwhile be necessitated being made to match the actual old weathered tone where it has asserted itself.

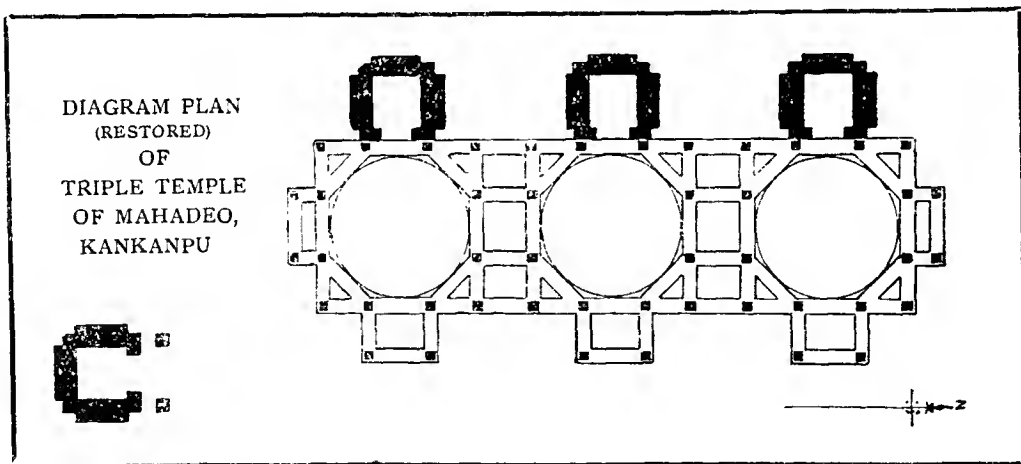
34. Counterfeit weather-staining of such a wholesale nature should never be attempted, in any circumstances. Subduing a patchy repair to the general weathered tone has its own justification, but supplying a general artificial colouring to match a patched repair is not a legitimate treatment of an ancient monument.

35. This temple, very much ruined and with originally excellent ornament now rather marred through long exposure to the weather, has a peculiar and interesting plan which is readily traceable among its fallen stones and jungle-grown foundations.

Temple of Mahadev, Kankanpur, Panch Mahals District.

36. It originally consisted of three distinct shrines, with their three distinct *śikharas*, *mandapas*, and entrance porches, each following the orthodox plan, but joined laterally, one with the other, by a connecting aisle to form one architectural whole.

37. The attached sketch diagram illustrates the arrangement of this triple temple, of which, unfortunately, only the inner structural shell remains standing; and that, indeed, of only the central and northern *mandapas* and porches; all else but for the ruined exterior facing of the southern *śikhara* base, has irretrievably disappeared.



38. Internally the two remaining *mandapas* and their covering domes are almost complete, and the ornament, profusely carved as an encircling band upon the dome masonry, reveals, even through the weathered surface texture, its original delicacy of execution.

39. A running band of geese, which, as a decorative *motif*, I believe to be unusual with these later temples—this I should ascribe to the 14th century A. D. or thereabouts—occurs upon the lower rings of the dome, and is reminiscent of a favourite feature of ornament in *Gupta* design, though the coincidence is probably accidental.

A Note upon requisite measures of conservation, which were comprised principally by the resetting of disturbed masonry—some of the *mandapa* columns were badly out of plumb—clearing jungle and the like, was drawn up and communicated, in usual routine, to the officers concerned.

40. An imposing tomb of excellent design, double-aisled about a central tomb chamber, and surmounted by a large dome flanked externally over the four corners of its pendentive springing with a lightly open *chattri* in happy contrast with the solidity of the dome proper. An entrance porch, with emphasising *chattri* of a large scale, projects from the west façade, and the whole presents as pleasing and proportionate an architectural group as one might seek.

Tomb of Mubarak Sayyid,
Mehmedabad, Kaira District.

41. Banded ornament, exquisitely wrought and most pleasing in design and disposition, and delicately incised *jāli* screening further augment the architectural worth of this monument, which vies with those of neighbouring Ahmedābād as an example of Indo-Saracenic art at its best; but these things count not with the occupants, with whom, it would appear, the perforated patterning of delicate *jāli* is but a convenient and opportune backing for the reception of roughly inserted sticks, to be weighted with bundles and a promiscuous wardrobe.

42. Heaped brushwood for fires stored in an outer aisle; and blackened ashes scattered all around the tomb right against the plinth; cooking pots, bedding, and domestic chattels *ad nauseam* littering outer aisle and inner chamber, in which last is erected a *kachcha* framing, lurid with baubles and tinsel and trumpery prints. What appears, too, to be an adapted dovecote, fouled with oil and accumulated filth, is placed, with a collecting box, before a central grave, and helps towards the general effect of disorderly abandon.

43. The monument, too, has been coated with the inevitable limewhite which yet adheres in many places about it. The roof *chattris* and the tomb chamber proper, within and without, also suffer badly in this respect, and I have recommended that every trace of this baneful disfigurement should be carefully and completely removed.

44. Public Works Department attentions were also provokingly patent in the white and streaky surface pointing which appeared in local patches all over the building, in some instances inches in width and approximating to "rendering". This I have asked should be wholly removed and, where really needed, new jointing inserted, recessed, and stained to the stone tone.

45. Two or three bays of the southern inner aisle had been blocked with *kachcha chunam*-spread walling to enclose a rubbish store. I have asked that endeavour be made to obtain the assent of the occupants to the removal of these additions, and to the wholesale clearance from the tomb of the rubbish that infests it.

46. At the north-east corner of the inner chamber, the two meeting bays of *jāli*-panelling had been backed from the interior with brick, and their perforations closed with mud and *chunam*.

47. Internally, the brick backing had, in its turn, been faced with a *kachcha chunam* travesty of the exterior stone *jāli*, and I have suggested that the whole of this backing should be stripped, leaving the original outer stone *jāli* undisturbed and intact. In one or two panels this outer stone *jāli* had been broken and badly restored with *chunam*, in which instances the old *jāli* missing is to be made good with stone, carefully wrought to the *geometrical* patterning of adjacent squares.

48. Structurally, the monument appears to be very satisfactory; but the, seemingly, isolated instance of surface disintegrating stones in the dome of second bay from the north-east corner along the east outer aisle will be treated with injected cement grout in the jointing, after first temporarily stopping with wet clay, and the surface painted with "Zerelmey's" stone fluid preservative.

49. Originally a structure of considerable architectural pretention, but now sadly dilapidated. It consists of a single, central, circular well-shaft surrounded by underground flatceiled chambers of some fourteen feet-square, the roof of which is carried at each end, laterally, upon a typical Saracenic arch of plain stone.

50. The well, in general, is built of brick, with structural features—as ceiling slabs and supporting arching, and oriel openings projecting into the well shaft—wrought in stone.

Bhamaria Well, Mehmedabad.

51. The brickwork has weathered to some considerable extent, and in many places has fallen completely away, leaving stair descents unsupported but for the tenacity of the old mortar by which they hang in suspension. These old weather scored bricks, however, appear to be still in excellent condition with a surface as hard as ever.

52. This monument is now too badly dilapidated and shorn of its architectural features to warrant aught but the minimum of structural repairs that will make for its continued existence; and conservation attentions will therefore be limited to the insertion of similar brickwork in the gaps under the unsupported stone stairs, and the filling of the fallen spandrels of brick at the haunches of the main stone ceiling supporting arches, where the thrust is at present almost wholly uncombated.

53. *The Vimala Shah Temple.*—My visit to these marble temples was chiefly for the purpose of ascertaining the extent, merit, and aesthetic justification of the “replacements”—restoration is here scarcely the term—executed and contemplated by the Jain community in their virtue and right of ownership.

54. The replaced parts, I freely admit, exhibited generally the skill of a clever craftsman, and the community are to be congratulated in having at their disposal the services of Mistri Kalyan Sukhadev in this work; but even so, it did not need the whitened surfaces of the newly wrought stones to differentiate them from their mellowed and time-softened fellows juxtaposed in contrast, with their flowing surfaces and subtly accented play of anatomical contour, patent particularly in the deposed *hathi* frieze of the aisled way through to the centrally placed *mandapa*.

55. But, with the community, these considerations would appear to have but little weight.

56. Rigid exactitude in the copying, too, does not unduly restrict the hand of the carver; for, as I noted in the *karkhanā* erected outside the temples, the actual work is executed after but a preliminary reference to the original part to be duplicated, which, it seems, is early restored to its place in the temple and the work completed without it.

57. This was the case with the three *toranas* in course of preparation (one for the outer façade of enclosing aisle at entrance way through to the temple court, one for the south bay of east side of *mandapa*, and one for the upper temple of *Vastupala Tejpal*), and with the partly finished pendants that are to be inserted in the ceiling bay at the southern façade of the central *mandapa* where it adjoins the shrine.

58. These pendants were, rightly, being copied from the smaller ones in the main dome, all of which, but one or two, are themselves restored.

59. Four broken lintels had been replaced—with all their decoration—and they are located as below:—

(1) Longitudinally in the 8th bay from east on the south side of surrounding aisle.

(2) In the south-west angle of the central *mandapa* dome of main temple.

(3) In the south side of passage way through the aisle at the entrance of the enclosed main temple. (It is at this entrance that three bays of the *hathi* frieze, of the original four, have been replaced, one of the two on the south side being new.)

(4) In the corresponding north side of this same entrance (where both original bays of the *hathi* frieze are replaced by new).

60. It is on the soffit of lintel No. 4 that the *chakra* of alien design and high relief has been carved, which Mr. Cousens, in an earlier report, recommended should be cut back to the common projection, though it had not been so reduced upon my visit

61. The other floral carving on this lintel—on both the new lintels at this entrance for that matter—was extraordinarily good, and lost little through comparison with the old carving adjacent.

62. This was not the case, however, with carved lintel No. 1; for the simple patterning of lozenge-leaved diaper resembled the original, adjacent *in situ*, in but a general way. The patterns were larger and the lozenge sides straight, in comparison with the smaller cushion-sided originals upon the adjoining beam. The circular-scrolled band beneath it, too, was thicker and coarser in its tendrils than the contrasting original; but these differences can, and I hope will, be corrected.

63. In the north aisle, at the 2nd and 4th bays from the east, the two wall-pilaster capitals replaced some seven years ago, seemed to fall rather short of the workmanship of the old one that intervenes between them; though the original difference in the pilaster width would necessarily account for the slight modification of the old ornamental forms appearing in the new work.

64. The entrance doorway to this main aisle-enclosed temple court had been provided with a new, and previously non-existent, moon-stone threshold of marble, wrought in a design adapted from a combination of that at the shrine ascending steps and the smaller circular thresholds of the aisle cells. In design it was not displeasing nor untoward in general effect; but the tendrils worked as infilling in the spaces about the *conch* which flanks the central moon-stone, were in high and much exaggerated relief, presenting in section an attenuated letter U, inverted, and not, as in the old examples, round in the natural form. The relief, as I explained on the spot to the *mistri*, should be reduced to correspond with the old designs.

65. Resting upon the remaining length of the original *hathi* frieze is a block of unwrought stone, inserted in support of a cracked lintel, which the *mistri* seemed ominously anxious to replace with new.

I have asked that such a replacement should be rigorously discouraged, as even from the untrammelled utilitarian aspect, it would be structurally superfluous; for the support of the present lintel at the back, where an inserted length of angle-iron would be wholly buried from view, can readily be provided for by opening up the concrete rendered roof outside—a most efficacious repair.

66. The Jain Community, I understood from the *mistri*, are desirous of restoring the *missing* members remaining from the almost complete marble interior of the main *mandapa*, and, in view of the quality of work of which this carver seems capable, I am of opinion that through so doing archæological considerations will not materially suffer. I make here the distinction between “restoration” of missing and “replacement” of existing parts.

67. I further incline to the view that, should the Community so desire, the replacement with marble of the present odd black-stone members, a lintel, the ornamented door jambs at the entrance to the aisled temple enclosure, roughly wrought with a travesty of the marble patterning, an odd capital,—themselves an early and make-shift repair—may be undertaken without appreciable detriment archæologically, and with much gain to the architectural whole.

68. The brass grille doors to the aisle cells, designed by Mr. Cousens, are most happy in design and in effect, and out of the 52 to be furnished 15 had already been erected.

69. The door to the shrine proper, with its tawdry mirror panelling, strikes a very strident note with this marble *mandapa*, and I hope to provide a design, in character with the new cell-door grilles, to be substituted for the present *kachcha* doors.

70. The side doors, of this shrine, externally, appear to have been constructed of adapted kerosene oil tins; and these, too, I hope, will be replaced in accordance with a design I will supply.

71. The entrance doors to the central aisle-enclosed temple court, where the moon-stone threshold afore-mentioned has been provided, are illwrought and

multi-tinted in violently contrasting colours; and I have suggested that a grille door, which may be a duplicate of the main shrine door design to be supplied, should be erected here to replace these present tawdry ones.

72. Another thing which painfully outrages one's feelings is the collection of cheap modern glass lamps that hang in tawdry profusion in the shrine chamber, and are scattered promiscuously about the *maṇḍapa* and enclosing aisles.

73. These, too, will, I hope, be replaced by new ones of a design, which I will supply, in sympathy with the characteristic architectural ornament in the temple.

74. I have suggested to the Jain Community in my note that the *kachcha* iron grille, framed about the added shrine of *Auba* in the south-west angle of the enclosing aisles to the central court is, as a protection, quite superfluous. It is certainly provokingly ugly and sadly disfigures its setting, and its removal is urgently to be desired.

75. Generally about the marble interior of the temple, and particularly in the enclosing aisles, a considerable amount of widely spread *chunam* pointing is to be seen, and it is a great disfigurement to the sculptured panels and ornament containing it.

I have asked that it may be very carefully removed, for it is not needed, structurally, in the least.

76. Many of these sculptured panels and individual nude figures are disfigured with pencilled markings in further delineation of anatomical details, the exaggeration of which, in some instances, is scarcely to be considered decent even from the most catholic point of view. I have asked that these markings be wholly removed, for they greatly detract from the natural beauty of the sculptures.

77. With regard to the ultimate disposal of the dismantled old sculptured stones—of the fragmentary portions of the replaced *hathi* frieze particularly—I have suggested for the consideration of the Community that a most fitting setting for them would be in the sculpture galleries of an archæological museum—the Prince of Wales Museum, Bombay, for preference. These fragments would there be preserved beyond risk of casual injury; and since to the Community, they are now but so much superfluous material, their transference to a museum, where their educative value, archæologically, would be considerably augmented, would thus be of advantage to all concerned.

78. *The upper temple of Vastupāl Tejpal.*—On my visit the *mistri* had in preparation for the main *maṇḍapa* a marble lintel and capital to replace the old black-stone ones existing. This replacement I do not consider to be open to material objection archæologically.

79. I have recommended that the missing *toranas* of the east and west central columnar bays of the *maṇḍapa* under the central dome may also be restored, as the Community, I understand, desire.

80. These *toranas* should be made exactly to correspond one with the other, and conform with the one existing between the outer column range on the west side of this central *maṇḍapa*.

81. I have also suggested that the *toranas* missing from the two bays in this outer western column range of the central *maṇḍapa* either side of the central bay, may also be restored in conformity with those of the corresponding inner range under the *maṇḍapa* dome.

82. Of the central pair of columns on this west side under the *maṇḍapa* dome, the capitals and upper part of the shafts have been roughly cut into in the execution of a long previous repair for the support of the broken connecting lintel, since replaced by a new one.

83. The damage then done is very disfiguring, and I have suggested that the injured portions be cut out as a quadrant on plan, and a new marble piece inserted to conform exactly with the portions remaining undisturbed.

84. In the two end flanking bays, north and south of the west aisle of this *maṇḍapa*, are two old, but *kachcha*-worked and half completed, flat slabbed ceiling-

panels of black-stone supported upon black-stone lintels and columns of alien design, and these cannot claim consideration as objects of beauty.

85. There is no objection, in my view, to their replacement by a marble construction—the columns and lintels conforming exactly with their present marble fellows, and the panelled ceiling infilling wrought exactly to match the circular-diapered patterning existing in the connecting ceiling bay between the enclosing aisle of the court at the west entrance and the central domed *mandapa*.

86. This pattern is simple and can be readily wrought ; while its repetition in the position of the present black-stone bays flanking the western aisle of the *mandapa* will have every æsthetic justification in the general ceiling design.

87. In closing my note I thought it desirable to add a few observations briefly summarising the archæological ethics bearing upon the repair and restoration of an ancient monument ; and I may, perhaps, appropriately refer to them in this general note.

They were mentioned under four heads :—

(a) *The restoration of missing parts.* This is desirable only when the monument suffers structurally or æsthetically from their loss. Such a restoration, while frankly appearing as a repair, may properly be reduced to harmony with its setting by treating with colour stain ; and, with this end in view, carved details of a purely mechanical character present upon adjoining old work may be repeated upon the new portion, provided that the same standard of execution can be assured.

(b) *The substitution of new for original work* can only be justified when the old material has decayed beyond all possibility of repair.

(c) *The substitution of new for old, but inferior, repairs.* This must always be decided upon individual circumstances. Sometimes an old repair, by the very reason of its being such, may have an interest in itself which makes its continued retention altogether desirable. In the case of alien black-stone members mentioned in the foregoing remarks their extreme inferiority in workmanship and design, and their detracting effect upon the exquisitely wrought and eminently architectural interior in which they so aggressively obtrude, quite discounts any inherent interest that may otherwise attach to them. Their removal and replacement by new white marble members to conform with the original work is, therefore, desirable.

(d) *The reproduction of old sculptural details* must always be condemned. Such copying inevitably results in but a travesty of the old work ; for, apart from its being a labour requiring anatomical knowledge and the highest technical skill, the initial incentive of the artist in its creation is lacking, and a lifeless, mechanical imitation alone results.

88. While encamped at Abu I visited the neighbouring village of Achalgarh to inspect the repairs which, I was informed, had been carried out to the *Mandākinī kuṇḍa* upon the recommendation of Mr. Cousens some seven years ago.

The Monuments at Achalgarh.

89. These repairs, I discovered on my arrival, were confined to the pointing with white *chunam* of the stone joints and cracks of the three sculptured buffaloes on the north side of the tank.

90. I have recommended that this pointing should be stained to the weathered tone of the stone, a mixture of powdered *dhobi*-nut and methylated spirits being used for the purpose.

91. The stepped sides of the tank and its surrounding platform are now too dilapidated and incomplete to warrant any expensive repair being undertaken to them ; but I have asked that the grass and vegetation and a few loose stones immediately about the buffaloes be cleared, and the vicinity maintained in good order.

92. Within a quarter of a mile of this *kuṇḍa*, and directly to its west, exists the remarkably well preserved Jain temple of *Parsvanāth*, carved externally with elaborate and excellently wrought ornament and figure sculpture.

93. It is in religious occupation—and, internally, is liberally limewhited. The originally open bays of what is now converted into an entrance porch are filled with *chunam*-faced walling which sadly mars the beauty of the temple; and I have recommended that the owners be approached with regard to the removal of this *kachcha* addition, and of the limewhite generally.

94. As is evident from the skew bracket-capitals projecting from the outer entrance front of the adapted porch, a further *maṇḍapa*, surmounted by a dome, originally existed at this end of the temple, and the present walled-in porch formed an open connecting hall between the missing *maṇḍapa* and the present one next the shrine.

95. This missing *maṇḍapa* dome of black-stone, complete with its octagon lintels, if I mistake not, is now to be found erected upon some alien columns in the collection of temples immediately south of the *ṣaṇḍākinī-kuṇḍa*; and in this same compound are, too, other isolated fragments of an original Jain temple—a characteristically carved porch with door jambs, sill, and head in marble, and some large slabs of a circular diapered ceiling, at present roofing a *kachcha* porch to the west entrance to the compound.

96. This *kuṇḍa* collection of temples is also in religious use—Brahmanical I understand—so I fear that nothing can be done towards any possible restoration of the original parts to the temple shorn of them; but as a matter of interest I have asked that the dimensions of the displaced dome and of the *Parsvanāth* temple proper be compared to further support or refute this notion, and the result communicated to this Department. I regret I could not spend the time to do this personally upon my visit.

97. These isolated portions of an original Jain temple in this tank-side compound are carved with patterns which, in some instances, exactly duplicate those of the upper temple of *Vastupāl Tejpal* at *Dilwāra*, with which they appear to be contemporary in original erection.

98. The transported dome of the temple in this compound has some of its masonry ring-stones spalled in places, and one or two of the encircling sculptured saints appear to be loose. I have asked that all the loose pieces should be reset in cement, carefully prevented from appearing on the face of the stones. Nothing further appeared to be needed here in the way of conservation.

99. The old temple of *Kāmeshvar Mahādev*, with its finely wrought ornament and decorative figure sculpture so well preserved, has suffered considerable dilapidation in the past; for, externally, most of the plinth of the open *maṇḍapa* has been stripped of its original wrought facing, leaving the skeleton structure of the interior exposed.

100. Parts of this, too, have fallen and have been replaced with the roughly wrought stones of a later period, with *chunam* faced brickwork, and even with the wrought and ornamented ceiling slabs of the original structure which have been promiscuously adapted to this purpose.

101. One or two bays of part of the decorated plinth facing—now badly weathered—still remain, but that is all; the original inclined plinth-capping, the previous existence of which is to be traced in the sloping chases of the angle gargoyle brackets at this level, has now wholly disappeared.

102. The architectural interest of this monument is now principally confined to the *śikhara*, although the remaining undisturbed portions of the *maṇḍapa* interior exhibit some excellently wrought decorative carving on ceiling panels, column shafts, and caps.

103. This *śikhara* is, moreover, practically complete in itself up to the top *chakra*, and the crowning vase lies at the base of the north *śikhara* wall ready to hand for resetting in position. I have asked that this fallen vase should be refixed,

and that the one subsidiary *chakra* which has fallen from the north-west angle block of the *sikhara*, and now lies outside *maṇḍapa* to the north, should also be reset to complete the original four.

104. One-half of a small moulded stone member has also fallen from its position immediately beneath this displaced angle *chakra* and I have suggested that it be replaced by a careful copy of the half remaining *in situ*.

105. A very small piece of the carved stone has fallen from this north-west angle block of the *sikhara*, and the space is to be filled with a new piece of stone very carefully carved to duplicate the original ornament, which is of a simple geometrical character. The present small gap spoils the complete façade, and to insert a plain piece of stone here would be but to emphasis the previous deficiency.

106. Some considerable settlement has taken place at the south front of the *maṇḍapa*, particularly at the extreme east angle column which, with its buckled plinth, inclines pronouncedly out of the perpendicular.

107. It would not appear to be unsafe, however; and the *chunam* pointing inserted as a bedding repair some four years ago shows no signs of any subsequent movement.

108. The *sikhara* ornament and figure sculpture loses much of its native effectiveness through being filled, in its deeper undercutting, with dried mud. I have asked that this should be thoroughly cleaned.

109. In the course of a previous repair of this dilapidated *maṇḍapa*, a stone parapet, patterned in relief with *kanguras* of Saracenic form, was erected at the roof edge above the *chajja*. In view, however, of its already defaced exterior, stripped of facing masonry and bereft of ornamental plinth, the incongruity of this *kangura* capping contributes little to the disfigurement of the *maṇḍapa*, and the gain from its removal would scarcely warrant the incidental expense involved.

110. These scattered ruins, deep in accumulated *debris*, cover a very considerable area, and, it would appear from the symmetrical disposition of the dilapidated remains of the five individual temples alone now standing, formed originally part of one huge monument of integrally related shrines, united in the one architectural composition.

111. The general destruction is, however, so complete, the heaped accumulation of *debris* over the site so considerable, that only a severe earthquake shock could possibly have accounted for such wholesale obliteration of these structures.

112. Among the several mounds of *debris* occur some which, from the casual survey at present possible on this undulating *debris*-covered site, appear to have no architectural relation to the whole; but these oddly placed mounds contain very few wrought or ornamented stones, and it is not possible now to discern among them any evidence of original foundations, or any outlined moulded base, defining a temple plan *in situ*.

113. The general scheme of arrangement would appear to have been a rectangle, square with the cardinal points, the north side of the general rectangle ranging about a quarter of a mile in length.

114. Upon this rectangular site were disposed the numerous temples, grouped, it would seem, in an alternating sequence of main and subsidiary shrines ranged in alignment upon *axes* east to west.

115. This much one may infer from the ruined remains standing; but the low and shapeless mounds of those shrines now totally obliterated fail to lend any definite evidence of the original extent of the rectangle north to south, or of the exact disposition of the temples located upon it.

116. Straggling walls of rubble stones and occasionally inserted carvings, culled from the fallen shrines by the opportunist villager, appear generally over the site, but are ruined and deserted in their turn; and these further confuse the traces of the old original remains.

117. It is, indeed, remarkable to find such an abundance of the original wrought and exquisitely carved facing stones scattered about the site, for these fragmentary pieces are innumerable ; but this is accounted for, to a great extent, by the arid and inaccessible nature of the desert country in which the ruins are now located, and by the total absence of any good water in the near vicinity.

118. The quality of the carved ornament and figures appearing upon the five fragmentary temples and among the wrought stones of the *debris* is, indeed, of extraordinary excellence and, as carving, approaches a degree of perfection almost beyond credence. Delicate, refined, in its detail, yet broad in its general effect and binding into unity the individual facets of the *śikhara* façades.

119. No one of these temples, unfortunately, is now complete in itself ; for of the three remaining smaller shrines the *maṇḍapas* are completely fallen, though evidence of their initial existence is readily apparent in the outlined plan of their moulded plinth bases.

120. With the remaining portions of the two larger temples, parts of the *maṇḍapa*, however, exist ; that of the large temple to the east being the better preserved. Here the *maṇḍapa*, with the exception of the roof and high ornamental plinth, is complete in its general structure, while the ornament thereon is exceedingly well preserved.

121. The *śikhara*, too, of this main temple is virtually complete but for the upper portion of its curving tower ; and it is possible that these missing portions may be wholly recoverable upon the clearance of the fallen *debris* about the temple base.

122. The immediate site of each of these temple ruins is at present roughly defined by the dilapidated plinth wall of its platform which raises the ruin above the general ground level. I have recommended that each one of these platforms should be cleared of the great amount of *debris* which at present covers it, and the earth and rubble accumulation levelled to the original floor of the platform, which will be readily apparent from the position of the lowest moulded member of the temple base. The platform thus cleared will be sloped slightly from the temple base to facilitate drainage of rain water, and the rubble sides, where fallen away, made good from the rubble *debris*.

123. I have asked that the many carved and ornamented stones lying among the *debris* should be carefully collected and stored upon the individual platform upon which they are found, so that the fallen stones of each separate temple may be kept separate and not confused with the others in one common heap.

124. The various wrought members, as *chakra*, column cap, base plinth, *maṇḍapa* roof masonry and portions of the one sculptured band, etc., may then be arranged in groups according to their kind ; and it will be possible, from a survey of the material available, to decide if a restoration of the fallen parts be in any way feasible—although, from the isolated and inaccessible nature of the site, I would not suggest that such a restoration is urgently to be desired.

125. The unwrought rubble of the *debris* may be profitably utilised in the erection of an enclosing wall about each separate temple ruin at a distance of say some thirty feet from it, and the space thus enclosed maintained free from jungle growth and in good order.

126. Upon each remaining ruin, some ornamented stones, displaced through the original collapse of the fabric above, are very precariously supported, and these are to be reset in position where this is possible. The fallen upper stones, dangerously balanced upon their present unrelated supports, are to be carefully brought down and stored with the wrought stones rescued from the ground *debris*.

127. Many additional items individually applicable to the separate temples—all of a simple though comprehensive nature—were also included in my note, which has been submitted to the Director General of Archæology in India for communication to the Jodhpur Darbār.

128. While at Ajmer I visited this old fort, and in my conservation note
 Taragarh, Ajmer. have included a recommendation for the repair of the
 Taragarh Gate. This monument is in fair condition,
 although it has suffered considerable dilapidation in the past, and much of the

upper fabric is missing. It requires some attention, however, to render it structurally satisfactory.

129. Generally about the structure, in many obvious instances, the gaps in the centre core behind the wrought stone facing need filling with good cement concrete of fine aggregate. Similarly, gaps in the core exposed through the fall of dressed masonry will be filled, where this is obviously structurally urgent; but in these cases of repair to the exposed and defaced core, the new concrete filling is to be made to coincide with the original face of the core and not that of the remaining stone facing adjoining—the intention being, of course, to maintain in structural order the fabric *as it exists*, without obliterating the traces of the original facing from the core exposed through its fall.

130. A great deal can be accomplished in this way with a little concrete for the preservation of this gateway. The encircling cracks in the dome and one or two lengthy vertical ones in the walls—very old fissures it would appear—will be treated by grouting with portland cement, after first saturating the adjacent work with water and closing the edges of the cracks against leakage with portland cement “jointing”, stained to conformity with the weathered tone.

131. At the east entrance, the remaining arch slabs in the outer façade of the gate, I have suggested, should be drilled and copper-clamped across the diagonal fracture and across the meeting joint at apex.

132. This operation will be readily carried out from the flat roof above with a little simple scaffolding. It would be a great pity to bring this old arch down, as, seen from the approaching road below, silhouetted against the sky, it is very effective in linking the separated side pylons into æsthetic unity, and it is all that remains as evidence of the arch facing fallen from above.

133. During the cold season I paid another visit to the Sanchi remains to complete the work—mentioned in my last report—of setting upright the heavy monolithic columns of the old *Gupta* temple immediately south of the main *tope*. This was very readily managed from the top of the grillage of temporary buttressing walls, which had previously been erected about them, by slinging six-ton screw jacks, in pairs, from the upper lintels to work with a lateral pressure against the containing walls.

134. In some cases the inclination from the vertical was found upon testing to be very considerable—one column was 10" out in a length of 20 feet, and with a base under 2 feet square! The spaces opened at the base in forcing back the columns into plumb were afterwards packed with generous steel wedges, jointed at the edges with portland cement and pressure grouted to form a solid base.

135. Copper clamps were further inserted in the upper surface of the lintels, which had also been reset in proper alignment, so that the whole thing is now in a substantial condition.

The straightening of this open ruined colonnade—originally contained in a temple—has done much for the appearance of the old site. An open grid of close set shafts, it presents a very effective foil to the massive solidity of the adjacent main *tope*; and this famous old hill crest, with its jungle-set architecture, drawn in soft silhouette against the afterglow at dusk, leaves with one an impression one never forgets.

136. Again, in closing this note I would mention that it does not, of necessity, represent a record of conservation work undertaken or inaugurated during the year under report; but is to be considered as a casual commentary upon such works, undertaken or proposed in general routine, as may hold a passing interest for the reader. Full particulars of works undertaken and proposed, and expenditure incurred, are given among the appendices (N, O, L, M, R.) at the end of this report, and a reference is invited thereto for further information in this respect.

J. A. PAGE, A.R.I.B.A.,

Assistant Superintendent,

Archæological Survey, Western Circle.

Camp Srinagar, dated the 22nd July 1915.

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